



LAW OPINION

Fatal consequences of lead pollution in Bangladesh

A comprehensive legal approach that addresses transboundary sources of lead pollution is urgently needed to monitor lead use and production in Bangladesh. The existing laws should also be updated regularly and followed up considering latest scientific development and research.

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Lead is a toxic, non biodegradable chemical element that mostly exists in ore form. Although it is a natural element of our environment, due to anthropogenic reasons such as combustion of gasoline, burning of coal, mining, smelting, using lead-based paints and batteries—the level of lead exposure has risen to an alarming level. Nowadays, besides air, water, soil, or plants it is even found in our food items, toys, cookware and beauty products. The recent 'Country Environmental Analysis Report of 2023' on Bangladesh by World Bank reveals lead as one of the top three environmental pollutants causing human deaths.

One of the public health concerns of lead pollution is that it can affect the intellectual development of children and decrease their cognitive abilities. It can have long-term effects on their physical and psychological development through the delayed effects. Lead can also pass from a pregnant mother to her fetus, leaving an intergenerational impact. Lead pollution leads to miscarriage, premature birth, and low infant weight as well.

Despite lead pollution being such a serious threat in our country, the legal development regarding controlling lead pollution here has been quite scattered. The umbrella legislation regarding environment pollution, Bangladesh Environment Conservation Act, 1995 is the central law. There is only one guideline (the Statutory Regulatory Order (S.R.O) No.45 of 2021), dedicated to Lead Acid Batteries (LABs), which are significant contributors to lead pollution. It provides guidelines for the buying-selling, import, recycling and safe disposal of LABs under section 6A of the 1995 legislation. Among several directions, it includes the requirement of obtaining and renewing of Environmental Clearance Certificate (ECC), ensuring safety and providing health and safety equipment to workers, and others dealing with

LABs. Industries dealing with batteries must follow proper documentation while producing, selling, importing, and recycling for proper regulation and safe disposal of LABs as per the Regulation. It also emphasises on digitalisation of such information. This Regulation requires the recycling industries to inform and update the Department of Environment (DoE) from time to time regarding their activities as per the guidelines. Moreover, unauthorised buying and selling of lead is strictly prohibited. It prohibits disposal, burning or storing of batteries in open places, water bodies and in waste dumps. It also emphasises on creating awareness among mass people and makes it mandatory for the battery recycling industries to be registered with the Accumulator Battery Manufacture and Exporter Association of Bangladesh (ABMEAB).

Another major source of lead pollution is household paints including enamel paints, synthetic paints, exterior paints for undercoating and finishing, and emulsion paints. Additionally, paint flakes contaminate the soil and spread through the air causing lead poisoning. Due to the constant persuasion of various NGOs such as the Eco-Social Development Organisation (ESDO) to control the use of lead in such household paints, in 2018, Bangladesh Standard Testing Institute (BSTI) specified a standard limit for using harmful lead content in paints where the maximum limit is 90 ppm.

The latest Bangladesh Environment Conservation Rule of 2023 in Schedule 1, while categorising different Industrial Establishment and Project, includes 'Lead Acid Battery Installation Industry' and 'Lead Acid and Dry Cell Battery Recycling Industry' in Orange Category. It includes 'Processed Metal from Ores Industry' and 'Lead Acid and other Wet Cell Producing Industries' under Red Category. Schedule 2 of the Rule provides standards for different kinds of water, and among various chemical measurement scale, it also includes how much lead can be present in different

types of surface water. Schedule 5 provides the highest liquid waste emission limits (without pH) for different industries depending on their categories. If lead is found over 10mg/L in any liquid waste or gaseous release of any industry, it will be considered as harmful element as per Schedule 14 of the rule.

Apart from these laws, there are several laws such as the Air Pollution (Control) Rule of 2022, the Solid Waste Management Rule of 2021, the Hazardous Waste (E-waste) Management Rule of 2021, which include different standard limits for lead emission depending on different types of sources.

Lead pollution is a serious threat to us because its impact will not only be confined within a particular time, area, or species. It is such a pollution which bears intergenerational impact possessing a serious threat for the present as well as future generation. Although there are laws dealing with lead from various environmental perspectives, how far they are being complied with, needs to be questioned. Unregulated and bare-handed dealing or recycling of LABs even by minor workers, significant rise in number of battery regulated three/four wheelers, lead in staple food items, using excessive lead violating minimum standards in paints and other industries and commodities, are common.

A comprehensive legal approach that addresses transboundary sources of lead pollution is urgently needed to monitor lead use and production in Bangladesh. The existing laws should also be updated regularly and followed up considering latest scientific development and research. Thus, it is indispensable that the legal standards for lead use be complied with and strictly monitored by the concerned stakeholders.

The writers are Assistant Professor in law, Bangladesh University of Professionals and LL.M candidate, Bangladesh University of Professionals respectively.

LAW LETTER

Copyright protection for AI-generated works

Artificial Intelligence (or AI) is a buzzword of our time. AI can come handy from understanding any topic to writing down something creative and presenting them as our own. But have we considered who would be the copyright owner of these AI generated creative works and what could be the potential legal consequences of using AI generated works as our own?

No international instrument on intellectual property rights clearly spells out how computer-generated works (CGWs) shall be protected. However, some jurisdictions such as the UK, China or the EU have advanced in this regard. Section 9(3) of Copyright, Designs, and Patents Act 1988 in the UK, provides that the human author of any intellectual property created by computer is the person who makes the necessary arrangements for the creation or completion of the work. Section 178 further adds that CGWs is work created by computer in circumstances where there is no human intervention. Therefore, by interpretation, the human author could be a programmer, a user who inputs data or anyone who assembles the conditions for the computer-generated work to be produced. The UK is one among only few countries to provide such copyright protection to CGWs. Chinese laws do not have any clear provisions regarding AI generated work; however, the courts in China have played an important role in defining the copyright of any CGWs. In two leading cases *Feilin v Baidu* and *Tencent v Yixun* case, the court held that human involvement and originality are the key factors to providing copyright protection to CGWs. China's recent regulations for generative AI came into force in August 2023 requiring AI-Generated work to be properly labelled so that there is proper attribution (i.e., means it will enable us to understand which was created by AI itself and which by human author).

The EU enacted the first comprehensive law on AI, the AI Act 2023 which indirectly supports the proper management and attribution of AI-generated works, helping to clarify and enforce copyright protections in the context of AI. Within the Bangladeshi legal framework, there is no definite answer to copyright queries regarding works generated with help of AI. Copyright of literary works, information technology-based digital works, and artistic work is protected by section 14(l) (a), section 14(l) (b), and section 14(l) (c) of Copyright Act 2023, respectively. According to section 15, generally, the person who creates a work is the first owner of the copyright for that work. For information technology-based digital works, the person or group who appoints (*niyogkari*) to complete the work, is the first owner of the copyright, unless there is a different agreement in place.

In sum, copyright protection of CGWs varies across jurisdiction. There is no single solution on who would get the copyright ownership of CGWs—it could be the program owner or the programmer or the user or none but the Algorithm itself or no owner and the AI-Generated work will fall under public domain. For regulating legal matters regarding AI we can either use a *sui generis* system or build upon and expand the existing laws. As the AI is a very dynamic and complex system to identify the owner of any work a *sui generis* system would serve better for dealing with legal issues related to AI.

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FOR YOUR INFORMATION

Legal remedies available for road accident victims

Most of the time the victims or their families are not aware of the remedies available under the existing legal regime for the deaths or grave injuries caused by road accidents. Pertinent in this regard are the Road Transport Act (RTA) 2018, and the Road Transport Rules (RTR) 2022.

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The Road Safety Foundation (RSF) reports that almost 6524 lives have been lost by accident in 2023. Along with deaths, several people are also left severely injured by such accidents. According to Bangladesh Passenger's Welfare Association, 53,207 people were admitted into hospital due to the road accident in 2023. However, most of the time the victims or their families are not aware of the remedies available under the existing legal regime for the deaths or grave injuries caused by road accidents. Pertinent in this regard are the Road Transport Act (RTA) 2018, and the Road Transport Rules (RTR) 2022.

Firstly, section 52 of the RTA states that the victim or the successor of the victim is entitled to compensation through application from the financial assistance fund at the rate of the amount fixed by the trustee board constituted thereunder. Rule 150 of the RTR prescribes that the application

must be submitted within 30 days of the accident. The Chairman of the trustee board shall constitute an investigation committee within 10 days of such application and the said committee shall submit an investigation report within 30 days. Then, the trustee board shall provide financial assistance within 30 days of the submission of such report granting the application. Rule 149 establishes a criterion for providing compensation to the victims. In the event of death, a minimum of 5 lakh Taka will be provided, while the loss of any significant limb warrants a minimum of 3 lakh Taka, and severe injuries, a minimum of 2 lakh taka, recoverable injuries, 1 lakh taka. The standard amount may be increased or decreased with the prior permission of the government.

If a person becomes aggrieved with the decision of the trustee board, he/she can apply for review. If he is also aggrieved by the review decision, he may appeal to the Secretary, Road Transport and Highway Division as per rule 152. Even if he/she is aggrieved with the appeal decision, a search committee will choose an arbitrator who is a retired secretary or a district judge or an individual of a similar status, to solve the issue in 45 days. In addition to the compensation, the victim or successor can also file a criminal case against the driver of the vehicle that caused the accident. Previously the relevant provision in this regard was Section 304B of the Penal Code, 1860 (causing death due to rash and negligent driving). Section 304B prescribes punishment of imprisonment not exceeding 3 years or fine or both. In 2018, the

BRTA extended the punishment up to 5 years for causing grievous hurt or death due to rash or negligent driving in section 205. In addition, if the driver intentionally causes death, the driver shall be punished with death. Besides, the driver also may be imprisoned for causing hurt, grievous hurt, or other crimes according to the relevant provisions of the Penal Code 1860. Again, a company also may be made liable for such an accident under Section 206 of the RTA. The procedure of filing cases and other proceedings shall follow the Code of Criminal Procedure, 1898.

Last but not the least, there is a scope to file a writ petition under Art. 102(l) read with Art. 44 of the Constitution of Bangladesh for infringing a fundamental right (i.e; right to life). The High Court Division on many occasions, directed that compensation be paid to the victim or victim's family due to the loss of life caused by an accident. In the *Md. Ruhul*

Quddus v Bangladesh and Ors. (2019) case, the court issued a *suo-moto* rule concerning a road accident resulting in the death of a college student named Rajib Hossain. Rajib, who lost his right hand and later succumbed to injuries, was involved in a collision between a bus from the Bangladesh Road Transport Corporation (BRTC) and another from Swajon Paribahan Ltd. The court found both BRTC and Swajon Paribahan Ltd. vicariously and directly responsible for the accident. As a result, they were directed to collectively pay a lump sum compensation of Tk. 50,00,000 (fifty lac only), to be evenly distributed between them, in favor of Rajib's two minor brothers.

Thus, the victim who is injured or the family of a victim who died have the above-mentioned three-tiers legal remedies in our law.

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