Cancer-causing chemicals dumped into Huron River threaten water safety of Michigan residents

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Large quantities of toxic and cancer-causing chemicals were released into the sewage system of Wixom, Michigan late last month by Tribar Technologies, an auto parts provider whose customers include Ford, General Motors and Stellantis Jeep.

The toxic mixture, which included the notorious industrial chemical hexavalent chromium, made its way from the sewage plant into the Huron River, which runs through the cities of Ann Arbor and Ypsilanti, before emptying into Lake Erie at Rockwood, 20 miles south of Detroit. A “no contact” advisory was put in place for a section of the river closest to the plant.

More than 3 million people could potentially be impacted by the contamination of the river, which flows through six counties downstream of the spill and supplies the drinking water for multiple cities, including Ann Arbor.

The spill into the sewage system may have begun as early as the morning of Saturday, July 30, despite the fact that Tribar claimed to have discovered it only on the morning of Monday, August 1, reporting the spill to Michigan’s Department of Environment, Great Lakes and Energy (EGLE) seven hours after it was discovered.

According to media outlet Great Lakes Now, staff at Wixom’s wastewater treatment plant, upon learning of the spill, worked to divert as much wastewater as possible into holding tanks and containment ditches which quickly were overfilled, and staff had to let the rest of liquid into Norton Creek, part of the Huron River watershed.

Wixom police began a criminal investigation into Tribar last Wednesday to determine what caused the release of toxic chemicals and whether it was a deliberate criminal offense.

Hexavalent chromium is used at Tribar in the production of decorative trim for the automotive industry. Compounds of hexavalent chromium are mostly found in industrial applications, such as paints, dyes, plastics and metal plating.

The Occupational Safety and Health Administration (OSHA) states clearly that exposure to hexavalent chromium, including ingestion, inhalation and skin contact, is known to be carcinogenic and can lead to damage to the respiratory system, kidneys, liver, skin and eyes.

Common industrial treatment of hexavalent chromium wastewater involves reducing it, through either chemical or electrical means, into trivalent chromium, a less toxic ion of chromium that is subsequently precipitated away as hydroxide. Wixom limits the concentration of hexavalent chromium in wastewater to less than 0.44 parts per million (ppm). However, of the 10,000 gallons of liquid released from Tribar, hexavalent chromium constituted five percent—hundreds of times higher than the set limit.

Tribar has stopped operations at the plant in response to a cease and desist letter issued by the city of Wixom allowing the company to release only typical household waste into the city’s sewage system.

In the coming weeks, contamination from the spill is estimated to reach the southeastern counties, including the city of Ann Arbor. Ann Arbor’s city government posted a statement on its website assuring residents that tap water is still safe for all purposes and claimed that “city staff have ordered materials that will arrive next week that will help us evaluate our ability to remove chromium from the water supply should it become necessary.” The city also did not put any limitations on recreational activities in the river.

Following the report of the spill on August 1, a series of surface water samples downstream from Wixom were collected and tested. Initially, samples from August 2 and
3 did not indicate the presence of chromium. However, on Friday, August 5, three samples from Milford’s Hubbell Pond and the middle of Kent Lake showed signs of chromium at concentrations of 11, 9 and 5 parts per billion (ppb) respectively. Upon release of the test results, EGLE officials said that they will continue their investigation, including determining whether most of the chromium spill remained bound up in the Wixom Wastewater Treatment Plant.

Concentrations of hexavalent chromium in water samples remain at a relatively low level at present. However, as the investigation is still at a very preliminary stage, the health impacts from the chemical dump and especially the criminality of the incident should not be downplayed. Serious questions should also be raised about whether workers at the plant receive proper protection when they are exposed to hexavalent chromium at work.

Tribar has a notorious record of violating the health and safety of workers and the general public. The company was founded in 1995 and is now owned by a private equity firm, HCI Equity Partners, which is based in Washington, D.C. The firm employs 60 people and has an annual revenue of more than $11 million, according to statistics from Kona Equity.

In 2018, Tribar’s Beck Road plant in Wixom was found by state officials to be the primary source of PFAS (per- and polyfluoroalkyl substances) contamination in the Huron River. The Centers for Disease Control and Prevention (CDC) issued a review in that year which associated PFAS with multiple harms, including cancer, liver damage, decreased fertility and increased risk of asthma and thyroid disease. The severity of the contamination resulted in “do not eat” advisories for fish taken from the river and surrounding lakes, ponds and streams, which remain in effect to this day.

Tribar faced no penalties or fines in relation to the 2018 wastewater releases. At the time, Michigan, like many states, had no regulations prohibiting wastewater releases tainted with PFAS, and Tribar had already phased out PFAS use at the Beck Road plant. Tribar took steps at the plant to filter PFAS from its wastewater, but storm water from the property ran into the Rouge River watershed, which subsequently flows into the Detroit River. In 2021, EGLE directed Tribar to “take immediate action” to fix the problem.

Far from correcting the wrongs, Tribar was found responsible for extremely high levels of PFAS in beef from a family farm in southeast Michigan this January. Crops fed to the cows were fertilized by wastewater biosolids that contained the toxic chemical released from Tribar. Unsafe beef from the contamination had already been bought by many local customers, including a number of local schools and pre-schools.

Tribar has not been penalized or ordered to halt practices which contaminate water for drinking, agriculture and farming. While the health of millions of residents along the river is threatened, neither HCI nor Tribar’s executives have yet to be charged or arrested for what is criminal negligence, to say the least. As of this writing, Michigan Governor Gretchen Whitmer has not publicly commented on the Huron River contamination.

It is impossible to discuss water safety, or lack thereof, in Michigan without mentioning the lead poisoning in the city of Flint, just an hour north of Wixom. In April 2014, under a profit-making scheme to promote the Karegnondi Water Authority (KWA), a private for-profit water entity, the city’s water source was switched to the heavily polluted Flint River without adding anti-corrosion treatment. More than 90,000 Flint residents were impacted by lead-laced drinking water and other toxic chemicals.

The high level of lead in Flint’s water was deliberately covered up by officials at all levels, including those from the Environmental Protection Agency (EPA) appointed by the Obama administration. In the eight years after the switch-off, hundreds of people were sickened, and countless children suffered from developmental issues due to exposure to lead, a neurotoxin. None of those responsible have faced any serious charges or jail terms.

Remaining unresolved even today, residents in Flint are still denied access to clean, lead-free water and have not yet received any compensation for the harm and damage done to them. More than 40,000 claims on a completely inadequate $626 million settlement have yet to be reviewed and approved. Meanwhile, many residents are still struggling with long-term impacts.

The repeated episodes of water poisoning across Michigan are crimes of capitalism, which prioritizes profit over the well-being, health and safety of the population.