

# **LEAD-WRAPPED TELECOM CABLES: A Case Study in Media Sensationalism vs. Credible Scientific Review**

## ***WLF Working Paper Executive Summary***

### **Background:**

- On July 9, 2023, the *Wall Street Journal* (*WSJ*) posted an eye-catching article entitled “America is Wrapped in Miles of Toxic Lead Cables,” followed by a series of related reports and articles in subsequent editions of the newspaper.
- This series was the culmination of investigations examining the prevalence of legacy lead telecommunication cables, connecting them to alleged human health risks from exposure to these cables.
- The reporting demonstrates a broader, troubling pattern in which the media presents testing performed by agenda-driven environmental activists as authoritative; in fact, the testing was not representative of credible scientific testing on lead in the environment. The testing results became a catalyst for unwarranted public fear, spurious attacks on corporations by politicians, new lawsuits, and the waste of public funds by agencies that investigated and ultimately discredited the sensationalist findings.
- Like similar news exposés, in this instance the *WSJ* presented findings on lead cables in a manner seemingly calculated to alarm readers about a “sprawling network” of hidden hazards causing a “significant problem.”
- Based on the limited information the *WSJ* has made available, our analysis finds that the approach was designed to overstate potential health risks, and therefore is not a reliable indicator of the actual health risks related to the presence of lead cables.
- The legal community assessing contamination risks should take these views into consideration, as should policymakers and media outlets who might wish to avoid similar errors.

### **Critique of the *WSJ*’s Approach:**

- The *WSJ* series on lead cables bore six of the usual marks of sensationalist reporting based on non-standard scientific testing:
  - *Conflicts of Interest:* Researchers from Marine Taxonomic Services (MTS) collected samples at the *WSJ*’s request. The Environmental Defense Fund (EDF), a nonprofit environmental advocacy group, partly funded and directed MTS’s work.
  - *Lack of Disclosure:* There are no statements in the final report that

suggest that MTS's work was independent of its funder. Typically, 'conflict of interest' or 'competing interest' statements are required for publication in peer-reviewed scientific journals.

- *Unclear Methodology*: MTS's report states that sampling was collected in six regions, but the actual number of samples taken in each location is not presented by the *WSJ*, nor is any rationale provided for why the 130 sampled sites were chosen.
- *Sampling Bias*: While the *WSJ* series suggested widespread lead concerns due to the presence of more than 2,000 lead-covered cables, they do not mention the bias built into that the sampling. The collection, on average, of only 1.5 samples per site—near the cables themselves—inevitably resulted in a higher incidence of lead detections in the sample set, therefore overstating cause for concern.
  - For example, in Louisiana, MTS collected water in nine places along Bayou Teche and sampled sediment in three, but only presents the highest lead levels among the group.
- *No Raw Data*: The *WSJ* does not describe the methods used to evaluate the lead levels in the water, and the MTS report notes that the samples were all provided to an analytical laboratory selected by the *WSJ* to conduct the analysis. However, neither the actual laboratory test results nor the methodology used to evaluate lead levels have been made available, as consistent with standard scientific practice.
  - For example, in Lake Tahoe, the *WSJ* identified Pace Analytical Services as the lab that evaluated the lead content, but did not make available either the actual laboratory test results or the methodology used to evaluate lead levels,
- *No Modeling Data*: The *WSJ* also refers to predictive analysis conducted by Professor Jack Caravanos to assess the impact of measured lead in children's blood. The details of the modelling are not described.

### **State and Federal Responses to *WSJ* Reports:**

- Non-credible scientific review led to the waste of public resources in debunking the erroneous conclusions from the misleading test results:
  - *EPA Guidance*: EPA acknowledges that, due to the natural occurrence of lead, citizens can expect to find lead in soils around their homes. EPA recently updated residential soil screening levels and recommends a value of 200 ppm be used for screening. EPA recognizes that contact with the soil is an important predictor of risk. EPA also recognizes that there are many ways to protect people from lead exposures, including cleaning, removal, or covering of lead contaminated soils or paints. The proper abatement protocol will depend on the individual situation. In the case of lead cables, it is

possible that removing and disturbing the cables could create more of an opportunity for exposure than simply leaving them in place. EDF has acknowledged that possibility.

- *Pennsylvania*: Reporting suggested significant health problems in California, Pennsylvania and Coal Center, Pennsylvania caused by buried lead cables. In response to the *WSJ* report, EPA sampled the soil, finding “no threats to the health of people nearby that would warrant an immediate EPA response action.”
- *New York*: Reporting suggested that in Wappinger Falls, New York, children were being exposed to unsafe lead levels at a park. In response, the governor of New York closed the park and undertook an evaluation. Based on the state’s analysis, EPA determined that “there are no immediate threats to the health of people nearby.”
- *New Jersey*: Reporting suggested that in West Orange, New Jersey, lead contamination from overhead cables was a concern for children attending an elementary school. Based on the state’s analysis, EPA determined that “there are no immediate threats to the health of people nearby.”

### **Conclusion:**

- The *WSJ*’s series and its aftermath offers a case study of how sensationalist reporting based on unrepresentative testing leads to reactionary measures such as regulatory investigations, proposed legislative initiatives by lawmakers, litigation, and further media sensationalism. The media, policymakers, and elected officials must take far greater care in questioning the accounts of professional activists and the results-oriented studies they promote. Society can avoid the waste of public resources necessary to debunk results by learning from this case:
  - *Non-credible Scientific Approach*: Given the design of the sampling program on which it was based, the *WSJ* evaluation at best represents a screening-level analysis. The sampling approach was biased toward locations where lead was most likely to be detected and the risk analysis conflated the presence of lead in soils with actual exposure, regardless of whether exposures were expected at the sites where sampling was conducted.
  - *Sensationalistic Language*: Unfortunately, the *WSJ* series of investigative reports does not acknowledge the limitations of its approach, instead using sensationalistic language to create the impression of a serious nationwide health tragedy.
  - *Lack of Fitness for Scholarly Publication*: The analysis presented by the *WSJ* does not meet today’s scientific standards and would not be fit for publication in a highly ranked scientific journal and therefore would not appear to provide a sound scientific basis for legal action.