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Legacy Lead-Sheathed Telecommunications Cables: Status and Issues for Congress

From the late 1800s through the 1950s, telecommunications companies hung, buried, or placed under water extensive networks of cables containing lead sheaths—casing that protects the wires—throughout the United States. By the mid-20th century, companies began installing new cables that use non-lead sheathing, removing some legacy cables while leaving others in place. In July 2023, media reports on lead-sheathed cables identified numerous sites across the country where legacy cables exist and claimed that they may be releasing lead into water and soils at potentially harmful levels. This reporting led some stakeholders, environmental groups, and public officials—including some Members of Congress—to call for action. Subsequently, there were historic drops in U.S. telecom companies' stock.

Within weeks of the July 2023 reports, AT&T, Verizon, the State of New York, and the U.S. Environmental Protection Agency (EPA) said they would conduct testing at sites named by the media. Initial EPA and state agency tests have not identified public health risks that would require immediate response or remediation. However, following the July media reports, plaintiffs have filed several class action lawsuits against telecom companies challenging their failure to publicly disclose information about lead-sheathed cables and protect utility workers from lead exposure.

This issue may be of continued interest to Congress, as constituents, utility workers, and advocacy organizations request information on cable locations and additional testing of identified sites. If it is determined that legacy lead-sheathed cables need to be removed or remediated, it could cost telecommunications companies resources, including time, staffing, and potentially billions of dollars. With litigation ongoing, Congress could wait for these cases to be decided before determining whether or not to take any action. If Congress were to take action, one option would be to direct new funds or redirect funds from existing congressionally mandated broadband and 5G programs to assess, test, and potentially mitigate any risks that subsequently emerge. Another option would be to rely on cable owners to undertake these activities and costs, which could be passed on to consumers.

Who Owns What?

Some telecommunications companies assert that only small portions of their networks consist of lead-sheathed cables. For example, AT&T estimated that lead-sheathed cables represent less than 10% of its copper cable footprint of roughly 2 million miles. Verizon also reported that lead-sheathed cables make up a small percentage of its copper network. It may be challenging to identify the location and ownership of all lead-sheathed cables due to the breakup of the Bell System in 1984 and subsequent mergers and

acquisitions in the U.S. telecommunications sector. Some lead-sheathed cables have been acquired by current companies. Some cables may have multiple owners if different companies acquired different parts of a network. Some lead-sheathed cables may be abandoned and have no owners. If removal or remediation efforts are required, questions of responsibility and liability may be complex.

Potential Risks of Exposure to Lead

The extent to which lead-sheathed telecommunications cables may contribute to overall human health and environmental risks of lead, in comparison to other sources, would depend on exposures. Proximity to lead alone would not necessarily be an indicator of risks. Site-specific circumstances that would have a bearing on risks may include whether the lead in cable sheathing may be intact or may leach into the environment and contaminate soil, groundwater, or surface water through which exposures could potentially occur. As with any chemical, potential risks would also depend on the exposure conditions, including the route of exposure through which lead may enter the human body (i.e., inhalation, ingestion, or skin contact), the dose (i.e., concentration, frequency, and duration of exposure), and the characteristics of the exposed individual (e.g., age, genetics, and health of an individual at the time of exposure). Age would be a significant risk factor for lead. The Centers for Disease Control and Prevention and others have found that children up to the age of six are more susceptible to lead exposures primarily because of developmental effects. The potential for human exposure to lead would also likely differ depending on whether the cables are located at the surface, suspended above the surface, buried underground, or in underwater areas, given differences in how individuals may encounter these environments. Ecological risks would also depend on exposures among animal and plant species.

Environmental Remediation

Multiple federal and state statutes authorize actions to investigate lead and other types of contamination and to remediate potential risks if warranted. At the federal level, for example, lead is a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended. Subject to the availability of funding, EPA may take CERCLA response actions to investigate and remediate the release, or substantial threat of a release, of lead into the environment under the Superfund program at sites on nonfederal lands. The state in which an individual site is located would have a role in such actions through a coordinated framework under CERCLA. CERCLA established categories of potentially responsible parties (PRPs), and PRPs may be liable for response costs and natural resource damages.

While determination of liability under CERCLA depends on site-specific factors, if there were a response action to address risks of lead from a telecommunications cable, PRPs could include not only the company that installed and operated the cable but also current and some past owners of the site on which the cable is located. A party may qualify for a defense to or exemption from CERCLA liability in some situations. See CRS In Focus IF11790, *Liability Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*.

In addition to CERCLA, lead is listed as a hazardous waste under the Solid Waste Disposal Act (often referred to as the Resource Conservation and Recovery Act or RCRA). Section 7003 of RCRA authorizes EPA to issue enforcement orders for abating an imminent and substantial endangerment to human health or the environment resulting from the past or present handling, storage, treatment, transportation, or disposal of a solid or hazardous waste. However, this authority applies only to a discarded substance, which is a prerequisite for a substance to be considered a solid or hazardous waste pursuant to the definitions of these terms under Section 1004 of RCRA. The potential applicability of RCRA to a site where lead is released into the environment from a telecommunications cable therefore would generally depend upon whether the release may constitute discarding under this statute.

If lead derived from lead-sheathed telecommunication cables were to migrate into groundwater or surface water, enforcement actions under two other federal statutes might be used to mitigate potential impacts on water quality. Section 1431 of the Safe Drinking Water Act grants EPA “emergency powers” to issue orders for abating an imminent and substantial endangerment to public health when (1) a contaminant “is present in or is likely to enter a public water system or an underground source of drinking water” and (2) the appropriate state and local authorities have not acted to protect public health. Section 504 of the Clean Water Act also grants EPA “emergency powers” to issue orders for mitigating a discharge of a pollutant into U.S. waters, if warranted, to abate an imminent and substantial endangerment to human health or the welfare of persons where such endangerment is to their “livelihood” (including the “inability to market shellfish”).

Whether actions may be warranted under any of these federal statutes would be a site-specific determination based on the potential risks of exposure and other criteria specific to each statute. The mere presence of lead contamination derived from a lead-sheathed lined cable would not necessarily warrant action under any of these statutes. If remediation were warranted under a particular statute, the removal of a telecommunications cable containing lead may not be required if alternative measures are more cost-effective and more practical from a technical standpoint to address potential risks. For example, potential alternatives may include encapsulating a cable to prevent the leaching of lead or land use controls (e.g., physical barriers) to prevent exposures. Another potential consideration would be the degree to which the state of jurisdiction desires federal involvement. States take the predominant role in investigating and remediating contamination at most sites

on nonfederal lands under their respective laws and jurisdictions. The federal and state roles in environmental remediation may raise policy questions for investigating potential lead contamination from telecommunications cables considering competing priorities for the use of federal resources among other types of contaminated sites where federal assistance may also be desired.

Class Action Lawsuits

Several class action lawsuits have been filed against telecommunications companies challenging their failure to publicly disclose information about lead-sheathed cables. As of December 2023, the majority of these challenges are based on violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (SEA). Section 10(b) of the SEA prohibits fraud in connection with the purchase or sale of securities in contravention of Securities and Exchange Commission rules. Section 20(a) provides that “every person who ... controls any person liable” for a violation of the SEA is jointly and severally liable for that violation. The plaintiffs—shareholders in the telecommunications companies—claim that the companies knowingly released materially false information to the public by failing to disclose information about lead-sheathed cables. This, plaintiffs argue, artificially raised the stock prices of the companies’ shares, causing investors financial harm when information about the lead-sheathed cables was later released (*Brazinsky v. AT&T*; *General Retirement System of the City of Detroit v. Verizon*; *Jankowski v. Verizon*; *McLemore v. Lumen Technologies, Inc.*; *Meehan v. Verizon*).

Utility workers have also filed a class action complaint against Verizon for negligence in exposing the workers to the lead-sheathed cables. The workers argue that Verizon was aware of the harm that its lead-sheathed cables caused and failed to protect workers from that harm. The workers argue that lead is a “hazardous substance” under both CERCLA and RCRA and that Verizon did not take the actions required under those laws to dispose of the retired lead-sheathed cables properly (*Tiger v. Verizon*).

Considerations for Congress

If Congress were to take action, one option would be to mandate an inventory of legacy lead-sheathed cable locations and ownership nationwide. It may also consider which agency could or should lead the development of an inventory (e.g., the Federal Communications Commission, EPA), whether interagency coordination is needed, and whether to share collected information publicly or only with relevant state and local agencies. Congress could, once an inventory is complete, mandate or encourage federal coordination or assistance (e.g., technical, financial) to jurisdictional authorities (i.e., federal, state, local, tribal). Finally, it could opt not to act, allowing private sector owners, current law, and the courts to address the matter.

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