

Independence Day Fireworks Bring Threat Of Perchlorate Contamination

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Indiana American Water, the largest investor-owned utility in the state, had a note of caution this year for Independence Day revelers: Fireworks pose a threat to waterways.

The utility “encouraged everyone lighting off fireworks to keep them away from local water sources,” [according to](#) the *Kokomo Tribune*.

“The utility said precaution can help reduce the amount of contaminants entering Indiana’s waterways. Recent studies have shown that many fireworks may contain certain compounds than can contaminate water supplies and present health concerns,” the report said.

The contaminant in question is perchlorate, found in many fireworks.

In the U.S. EPA’s perchlorate fact sheet, [the agency notes](#) that the contaminant is highly soluble in water and migrates quickly from soil to groundwater. Various states have health-based goals or standards for limiting the contaminant in drinking water.

“Common treatment technologies include ion exchange, bioreactors and in situ bioremediation,” the agency explained.

Joe Loughmiller, a spokesman for the Indiana utility, [discussed firework safety](#) with Indiana Public Radio.

“The main thing is just to make sure you’re not setting these fireworks off near lakes and waterways, and then if there’s debris left over afterwards, make sure you clean that up,” he said.

“Loughmiller also says public firework displays usually take good care to clean up after themselves, so Hoosiers might want to skip personal firework displays all together,” the report added.

A [report by the U.S. Geological Survey](#) (USGS), released last year, found fireworks probably caused perchlorate contamination in groundwater and surface water within Mount Rushmore National Memorial.

The agency noted that the contaminant can interfere with human thyroid function when ingested in drinking water.

Galen Hoogestraat, a USGS scientist and the lead author of the report, explained the significance of the agency's findings for water managers.

"The lack of alternative perchlorate sources in the area, such as a military site or agricultural land with applied fertilizers, and the presence of firework debris suggest that past fireworks are the perchlorate source," Hoogestraat said. "Our results can help park managers protect water quality at this iconic national landmark."

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