

High mercury levels in birds blamed on mining

Slide by Neil Goalby. Available from rsc.li/3OhL7b8

Mercury is used in small-scale gold mining to extract minute gold particles from soil, forming an amalgam when bound to gold. When heated, the amalgam releases mercury vapour, contaminating air and surrounding soil and water.

Microbes then convert the mercury into a readily absorbable form leading to biomagnification in the food chain. Researchers analysed blood samples from birds across Central and South America and found mercury levels nearly four times higher at sites affected by small-scale gold mining.



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38% of global mercury pollution comes from small-scale gold mining

Questions

1. Why is gold found in the earth as the metal itself?
2. Explain how the gold is separated from the amalgam.
3. Explain why this method of gold extraction is harmful to the environment.