The Copper Voluntary Risk Assessment

Working with public authorities to ensure the safe production and safe use of copper products
Copper is a naturally occurring material, essential to modern day life and modern day life is essential material, occurring naturally.

Copper can continue to be recycled over and over again with no loss in its performance and qualities.

Copper is naturally antibacterial and so inhibits the spread of harmful bacteria in water and air distribution systems.

Copper is naturally anti-microbial and so inhibits the spread of harmful bacteria in water and air distribution systems.

Copper keeps blood vessels, nerves, the immune system, and bones healthy.

Copper is an essential trace mineral present in all body tissue. Along with iron, copper helps in the formation of red blood cells and keeps blood vessels, nerves, the immune system, and bones healthy.

Copper products have useful life cycles ranging from a few months in consumer electronics, up to centuries in architectural applications.
Did you know that?

Copper products are at the heart of the EU’s conventional and renewable electrical energy systems, they help deliver clean drinking water and facilitate modern transportation and communications networks. Copper is also an essential nutrient, ensuring the health and well-being of people across the globe.

The safety of copper production and use has been confirmed by the industry’s “Voluntary Risk Assessment” (VRA) performed, between 2000 and 2008, in cooperation with the Italian Government’s Istituto Superiore di Sanità.

This proactive, voluntary initiative of the industry was fully endorsed by the EU authorities in April 2008. It was also the first example of its type in Europe to be completed in advance of REACH, the new European Union’s regulation on chemicals.

Recognised and accepted by the scientific community and by the EU regulatory authorities, the VRA provides a comprehensive and sound scientific basis on which to assess the safe production and use of copper.

The VRA:
- Quantifies copper emissions during production and use
- Assesses copper exposures to workers, consumers and the environment
- Recommends safe limit values for the environment and human health
- Compares all of the above and recommends where additional risk management measures are needed
The European Copper Institute (ECI), acting on behalf of the copper industry, has worked closely with EU authorities to ensure the objectivity, quality and transparency of the risk assessment, of its results and of its follow-up.

The VRA provided strong arguments that copper can continue to be safely used in high growth sectors.

Compliance with the European copper industry’s high safety standards and investments ensures the copper industry is safe.

Safety and social issues were identified where potential risks could exist.

The VRA is an essential nutrient for humans as well as for all living organisms.

Copper levels measured in European surface waters, sediments and soils are generally well below the recommended safe threshold values.

The production and use of copper are generally safe for Europe’s environment.

Copper is an essential nutrient for humans and local environments around copper industry installations.

A few local issues were identified where potential risks could exist.

The copper industry will investigate these further and prepare adequate risk management plans.

Immediate results:
- High-quality data gathered to assess the safety of the current production processes and uses of copper.
- Commitment by the copper industry to implement the recommended risk reduction measures.

Key features:
- A transparent process:
  - The VRA was reviewed in depth by independent peer-review panels staffed by renowned scientists.
  - The final 1,800 page dossier is available on ECI’s website.
  - The industry invested €8 million in the VRA.
- A broad and committed industry participation:
  - From the producers of copper metal, powder and chemicals, through to the downstream users, the copper industry was involved in the whole copper value chain.

Long-term perspectives:
- The copper industry will continue to invest in and improve current production processes and uses of copper.
- Commitment by the copper industry to implement the recommended risk reduction measures.
- High-quality data gathered to assess the safety of the current production processes and uses of copper.

Conclusion:
- Copper is an essential nutrient for humans as well as for all living organisms.
- Copper is clean.
- Copper is safe.
- Copper is essential.