

For Immediate Release
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ENVIRONMENTAL PROTECTION AGENCY RAISES SAFETY LIMITS FOR BORON CONSUMPTION

Review of 200 Studies Results in Increasing Levels Considered Safe for People

VALENCIA - The National Center for Environmental Assessment (NCEA) today announced its finding that people can safely consume more than twice the amount of boron previously considered harmless. Boron is a nutritionally important element that is present in all food in trace amounts. NCEA is the division of the Environmental Protection Agency charged with assessing health risks associated with substances found in the environment.

NCEA increased its allowable daily dose of boron from 6.3 milligrams to 14 milligrams per day. Boron is an essential micronutrient for plants and most people eat between one and three milligrams every day as part of a healthy diet of fruits, vegetables, grains, cereals and nuts. The revision was the result of a multi-year assessment of more than 200 studies on boron's health effects, some of which were completed recently by scientists at the University of California, Irvine, and the Research Triangle Institute.

"We applaud the NCEA for advancing the world's scientific understanding of boron's health effects," said Gary Goldberg, Chief Executive of Rio Tinto Borax. "As world leaders in boron science and supply, our research points to the same conclusion: the more we know about boron, the more comfortable we are that boron is safe for people and the planet."

NCEA conducted its risk assessment on boron to update the EPA's Integrated Risk Information System (IRIS), a database of human health effects associated with exposure to more than 500 substances found in the environment. IRIS is widely considered one of the world's most robust databases in this field.

NCEA also reduced its uncertainty factor for boron from the default level of 100 to 66 - a precedent-setting policy change. Uncertainty factors are mathematical formulas applied to data which are used to protect populations from hazards that cannot be assessed with high precision. NCEA's decision to assign a lower uncertainty factor to boron reflects the availability of new and more reliable research.

"This scientific breakthrough bodes well for farmers who rely on boron fertilizers as essential crop nutrients, and for manufacturers who rely on boron-based products as essential ingredients in fiberglass, glass, ceramics, detergents, flame retardants and

wood preservatives: the building blocks of an acceptable standard of living," said Mr. Goldberg. "NCEA has set a new upper limit for boron consumption. This accomplishment brings us to the next horizon in boron science: to determine the lower limit, or how much boron is essential to human health." said Mr. Goldberg.

About NCEA

EPA's Office of Research and Development conducts research to help ensure that efforts to reduce environmental risks are based on the best available scientific information. The National Center for Environmental Assessment (NCEA), a major component of ORD, is EPA's national resource center for human health and ecological risk assessment. NCEA conducts risk assessments, carries out research to improve the state-of-the-science of risk assessment, and provides guidance and support to risk assessors.

NCEA occupies a critical position in ORD between (1) researchers in other ORD components generating new findings and data and (2) regulators in the EPA program offices and regions who must make regulatory, enforcement, and remedial action decisions. As a result, NCEA plays an important role as a consultant to EPA programs and regions on the use of science in environmental decision making and also influences the direction of environmental research.