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Op/Ed

Putting uranium mining 'misinformation' to rest

By H.L. DODDS

As someone who has devoted my professional career to the scientific and academic pursuit of nuclear energy, I am disconcerted by the misinformation being spread by opponents of uranium mining in Virginia to stoke unwarranted fears among residents.

As Virginia examines whether to allow uranium mining, I believe it is important that citizens and policymakers have the best information available to make their decision. This is why I feel compelled to respond and put some of this misinformation to rest.

Contrary to the false assertions of some mining opponents, there is no institution better suited than the National Academy of Sciences to assess the human health and environmental impact of uranium mining in Virginia.

Residents of the state - from the Southside region to Hampton Roads - should have full trust and confidence in the National Academy as the nation's most prestigious and respected body for scientific and technical research.

For more than a century, the National Academy has maintained an

unimpeachable record for impartiality and independence from influence.

Virginia residents should also rest assured that uranium mining and milling is one of the most heavily regulated industries in the United States.

The industry, which has made great strides in the past few decades to improve protection of the environment, human health and worker safety, is overseen by a veritable alphabet soup of regulatory bodies - the Nuclear Regulatory Commission, Environmental Protection Agency, Mine Safety and Health Administration and the Occupational Health and Safety Administration, to name a few.

These agencies are vigilant in enforcing their strict standards for radiation protection, air and water contamination, tailings management and worker safety.

For example, the maximum level of radiation exposure allowed by these regulators in areas surrounding uranium mines is equivalent to a small fraction - less than 10 percent - of the natural

background radiation we all receive each year from our environment, homes and routine medical procedures.

A single abdominal x-ray would expose someone to five times the amount of radiation allowed by the EPA and NRC for uranium mining operations.

As the U.S. Secretary of Energy and Nobel laureate Stephen Chu stated unequivocally in Pittsylvania County several months ago, modern uranium mining can be done safely and in an environmentally responsible way.

There is a large body of evidence and numerous studies which have found no link between uranium mining and the incidence of cancer and other illnesses in surrounding populations.

Several studies of uranium mining and milling communities in Texas, New Mexico and Colorado conducted by John D. Boice Jr., scientific director of the National Epidemiological Institute, found virtually no difference between cancer mortality rates in mining areas versus non-mining areas.

Opponents of mining have consistently and recklessly raised

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anxiety among local farmers and residents by perpetuating myths about mining activities contaminating local groundwater and agriculture with harmful levels of radiation.

These myths are based on a fundamental lack of understanding of basic science and should be put to rest once and for all.

Contrary to their assertions, it would be virtually impossible for radon gas - a byproduct of uranium - to travel distances far enough and in quantities large enough to contaminate the vegetation, air and water of areas surrounding mining activities.

The elementary physics of radon gas prevent this from happening. Because radon gas is seven times heavier than

air, it is impossible for it to escape more than a few feet above ground and certainly to travel distances further than a few hundred feet.

This is why radon is usually found in the basements of homes because it is too heavy to climb the stairs to the first floor.

Cherry-picking and misappropriating pieces of scientific studies to prove dubious claims is a favorite pastime of anti-nuclear advocates.

So, recent attempts to misrepresent and conflate the results of an ecological study of coal mining in West Virginia with uranium mining in Virginia should come as no surprise.

The most elementary grasp of the methods, geology, geographic location,

environmental footprint and scale of the two vastly different kinds of mining would prevent any responsible person from making such a spurious comparison.

The people of Virginia - particularly those living in Southside and Hampton Roads - deserve much better.

Finally, although I now live in Tennessee, I lived in the Hampton Roads area in the 1960s while working for NASA. The area is a wonderful place to live and will continue to be so with modern day uranium mining.

H. L. Dodds is IBM professor and head of the Nuclear Engineering Department at the University of Tennessee in Knoxville, Tenn.