## THE UNIVERSITY OF BRITISH COLUMBIA



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Professors Douglas R. Toomey & Emily Hooft Department of Geological Sciences University of Oregon

Professor William Wilcock School of Oceanography University of Washington

Dear Doug, Emily and William:

We are writing to express our outrage that well considered, forefront scientific research, the primary objective of which is an improved understanding of geological and hydrological processes associated with Endeavour Hydrothermal Vents Marine Protected Area, is being jeopardized by activist organizations with little appreciation of its true benefits and impacts.

Based on previous proposed seismic studies on the west coast in which one of us (RMC) was involved, these activists have a clear "agenda" – to prevent any and all marine seismic studies on the west coast that are within Canadian jurisdiction. Such a development would preclude further understanding of many geological features and processes that are critical to Canada's socio-economic well being. Marine seismic studies are essential for improved understanding of earthquakes (that also can generate damaging tsunamis), volcanic eruptions and methane hydrates, which could be a major source of hydrocarbons and/or a major factor in climate change. With respect to the hydrates, how can we gauge their true impact without further study?

Your proposed research will not only shed new light on the geological environment that enables the existence of a unique biological ecosystem but will also supply constraints on hydrological properties of oceanic crust that are critical to understanding earthquake generation in subduction zones, like that which underlies the west coast of North America. Moreover, as you are aware, there has never been a documented case of harm to marine mammals or other marine life as a result of the type of seismic survey you plan to undertake. You have already stated that all procedural protocols associated with such studies will be followed.

The activist organizations' last-minute attempts to derail this research after many months of preparation on your part in following established protocols to meet stringent environmental standards, is a particularly reprehensible tactic on their part. Our Canadian government should not allow such tactics to impede legitimate research that benefits the general public and adds to our greater understanding of the planet on which we live.

Please feel free to employ this letter of unqualified support in any manner that may assist you in your case.

Sincerely yours,

Michael G. Bostock Professor in Seismology Ronald M. Clowes, CM, FRSC Emeritus Professor in Seismology