Geological Survey of Canada of the Earth Sciences Sector of the Department of Natural Resources of Canada - U.S. Geological Survey-Project Annex No 5 Title: VOLCANIC ASH RESPONSE COORDINATION

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Responsible Senior Managers: USGS: P. Patrick Leahy, Associate Director for Geology (703) 648-6600; GSC: Murray Duke, Director General (613) 995-4093.

Scope: To continue the participation of the GSC in the development of the Interagency Atmospheric Ash-Hazard Communication Plan (PNW Plan) for the Pacific Northwest region, currently being developed by the USGS and other agencies; and to establish a future Project Annex (PA) between the USGS and the GSC to facilitate implementation of the PNW Plan, when it is finalized, and the existing Alaska Interagency Operating Plan for Volcanic Ash Episodes (dated October 1, 1999).

<u>Prior History</u>: A draft version of the PNW Plan was written after a meeting in 1998, at which USGS and GSC were represented. The draft document described the role of the USGS and GSC under the Plan. Subsequently, an interim ash response plan for Canada was drafted as well.

In addition, a meeting was held with parties responsible for volcanic ash responses from both the United States and Canada, in Kansas City, Missouri in May 2000. This first North American Meteorological Operations Volcanic Ash Meeting (NAMOVAM) session was called in order to review the status of ash hazard responses for North America. The second NAMOVAM conference has been scheduled for 2001, in Kelowna, British Columbia.

Work Plan: The purpose of this PA is to help coordinate these prior efforts affecting the USGS and the GSC. The USGS (in coordination with the GSC) will produce a revised draft of the PNW Plan by September 1, 2001, in preparation for the second meeting of NAMOVAM in Kelowna. After the Kelowna meeting, the principal correspondents for the USGS and the GSC will arrange for a meeting later in 2001 to develop a future USGS-GSC PA to cover the geological (as opposed to meteorological) aspects of the response to volcanic ash hazards. The future USGS-GSC PA will encompass response plans for eruptions at all Alaskan, Canadian, Cascades, Yellowstone, and Long Valley volcanoes.

<u>Funding Arrangements</u>: The two Parties (the USGS and GSC) will contribute in-house expertise as appropriate in the development of these agreements, each bearing incurred expenses individually. Implementation shall be in accordance with roles and responsibilities that each of

the Parties has with other national, regional, and local agencies and authorities, both pre-existing and as defined by the completed ash hazard response plan and the future PA.

Intellectual Property: Pursuant to the "Agreement on the Allocation of Intellectual Property Rights, Interests and Royalties for Intellectual Property Created or Furnished under Certain Scientific and Technological Cooperative Research Activities" between the Government of Canada and the Government of the United States of February 4, 1997, the Parties shall retain existing Intellectual Property Rights that they bring to this project.

Duration and Termination: This PA will remain in effect until the successful development of an additional PA to cover the geological aspects of the response to volcanic ash hazards, at which point it may be terminated by mutual consent. Failing the development of a future PA, this PA will remain in effect until April 9, 2004. If the Memorandum of Cooperation (MOC) between the USGS and the GSC of the Earth Sciences Sector of the Department of Natural Resources of Canada is extended prior to that date, this PA will continue in effect for the duration of the MOC. Either Party may, by giving the other Party thirty (30) days written notice, terminate this PA. Changes or modifications to this PA shall be in writing and signed by the Parties. Each Party shall immediately upon termination, return the other Party's papers, materials, or other property held for the purpose of carrying out the project.

FOR THE U.S. GEOLOGICAL SURVEY OF THE DEPARTMENT OF INTERIOR OF THE UNITED STATES OF AMERICA:

FOR THE GEOLOGICAL SURVEY OF CANADA OF THE EARTH SCIENCES SECTOR OF THE DEPARTMENT OF NATURAL RESOURCES OF CANADA:

P. Patrick Leahy Associate Director for Geology United States Geological Survey Murray Duke Director General Geological Survey of Canada

Date 6/01/01

Date

Subject Objet U.S. Geological Survey - Project Annex No 5

Government Gouvernement

Attached please find an original PA titled: *Volcanic Ash Response Coordination* signed by Patrick Leahy and Murray Duke. The other original has been couriered to USGS, Reston, Virginia.

Margot

Expansion Des Anaires (SST)

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