



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
Office of Oceanic and Atmospheric Research  
Earth System Research Laboratory  
325 Broadway – David Skaggs Research Center  
Boulder, Colorado 80305-3328  
January 8, 2007

Ms. Johanna M. Thorlacius  
Icelandic Meteorological Office  
Bustaoavegur 9  
ICELAND

Dear Ms. Thorlacius:

Thank you for letting us know that Oskar, the light house attendant at Storhofdi, will be retiring later this year. Oskar has been extremely conscientious and has collected almost 600 air samples for NOAA from 1992 until the present. We wish Oskar health and happiness in his retirement.

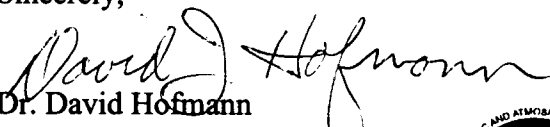
We are now very concerned about the future of the NOAA air sampling project at Storhofdi. As you can see from the enclosed plot of CO<sub>2</sub> measurements, collection of air samples at Storhofdi began in 1992 and we have now obtained a classic time series showing the increasing trend of CO<sub>2</sub> and it's seasonal cycle, and the interannual variability of both. These data, together with data from the entire global network, are used to calculate estimates of CO<sub>2</sub> sources and sinks on global, hemispheric, and regional scales. In addition to CO<sub>2</sub>, each sample is also measured for CH<sub>4</sub>, CO, H<sub>2</sub>, N<sub>2</sub>O, SF<sub>6</sub>, <sup>13</sup>C/<sup>12</sup>C and <sup>18</sup>O/<sup>16</sup>O of CO<sub>2</sub>, <sup>13</sup>CH<sub>4</sub>, and volatile organic compounds.

The value of an environmental time series increases dramatically as it gets longer. The measurements at Storhofdi are now in their 15<sup>th</sup> year. It would be a great loss to science and society to now discontinue these measurements. We can only measure the air at Storhofdi now; we can never go back and measure the air from yesterday, last week, or last year.

We strongly urge the Icelandic Meteorological Office and the Icelandic Maritime Administration to continue to support the collection of air samples and other measurements at Storhofdi. It is an excellent site for measurements that are representative of the North Atlantic Ocean and it's loss would be a blow to NOAA's (and the world's) studies of the carbon cycle and global climate change. If a person is found who can take over Oskar's air sampling duties, we would provide training either in Iceland or in Boulder.

Please let me know if I can provide further information in support of this important scientific activity.

Sincerely,

  
Dr. David Hofmann  
Director, Global Monitoring  
Division

