



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

JAN 31 2011

Margaret Diann Hursh  
PO Box 233  
Valdez, Alaska 99686

Dear Ms. Hursh:

Administrator Lisa P. Jackson asked that I respond to your email of December 28, 2010 titled "Consider glycol ether for 'military syndromes.'" Your email refers to various glycol ethers and effects in conjunction with a variety of scenarios. I believe that all of those issues have been addressed in my earlier responses to you, with the exception of the glioblastoma request to the Department of Veterans Affairs and other organizations. Thank you for notifying us of that request to start tracking the statistical rate of brain cancer occurring in our veterans, based on the occurrence of glioblastoma in veterans that served in Vietnam.

I am sure you are aware that there are numerous glycol ethers, some more hazardous than others. Overall, EPA and others in the scientific and medical communities have studied the effects, both acute and chronic health, as well as environmental, of various glycol ethers, including 2-butoxyethanol (EGBE) and ethylene glycol dinitrite (EGDN), both of which you mention in your email.

While EGBE has fewer significant adverse effects than many of the other glycol ethers, the Agency has taken, and continues to take, a variety of steps to regulate its use and releases, as well as initiated a number of voluntary efforts, to control its use and find suitable substitutes. In March 2010, EPA reported in its Integrated Risk Information System ([www.epa.gov/iris](http://www.epa.gov/iris)) that the Oral Reference Dose and Inhalation Reference Concentration levels had been reduced. These reductions will further reduce people's allowable exposure to EGBE. Previously EGBE was sometimes classified as a "possible" carcinogen. However, as of March 2010, additional research, also reported in IRIS, led EPA to state that EGBE is deemed "not likely to be carcinogenic to humans" at environmental concentrations below or equivalent to the Reference Dose and Reference Concentration, based on laboratory animal evidence, mode-of-action information, and limited human study information. Regarding its use as an oil spill dispersant, as of July, 2010, several dispersant products containing EGBE were removed from the National Contingency Plan schedule, although other versions of Corexit products still remain on the Plan and may be used in oil spill circumstances.

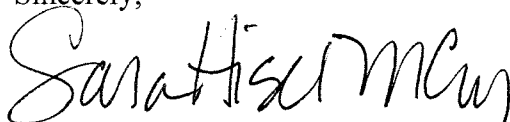
Other departments of the Federal government are aware of the health hazards of EGDN you mention and take copious steps to protect against those hazards, during its production and

use. Although EGDN is not formed when dynamite explodes, it is the primary component of dynamite. It is added to nitroglycerin to lower the freezing point of the product. Fortunately, EGDN has little use in today's military although it is still used in civilian dynamite formulations.

You also mention that you hope the US recognizes that flu symptoms are more probably the result of glycol ether poisoning rather than being related to any virus. While some of the symptoms of the flu and glycol ether poisoning are the same, there are other differences in symptoms. In addition, I am not aware of any studies that show any direct connection between glycol ethers and the flu.

I appreciate your concerns about this chemical. EPA is aware of the effects of various glycol ethers and continues to take actions to reduce exposure to it whenever possible.

Sincerely,

A handwritten signature in black ink that reads "Sara Hisel-McCoy". The signature is written in a cursive, flowing style.

Sara Hisel-McCoy, Acting Branch Chief  
Existing Chemicals Branch  
Chemical Control Division