

**From:** [judy.bob.r@comcast.net](mailto:judy.bob.r@comcast.net)  
**To:** [DOL Energy Advisory Board Information](#)  
**Subject:** Missing hazardous substances from Rocky Flat's site-specific list  
**Date:** Friday, June 21, 2019 4:13:29 PM

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Dear Dr. Steve Markowitz,

I am accepted by the USDOL under the EEOICPA of 2000. My case number is 28222. I have recently learned of your role as a chairman of DOL's *Advisory Board on Toxic Substances*. In preparation for a hearing in Denver, CO with DOL's FAB on June 19, 2019, I became aware of the fact that there are a number of possibly toxic chemicals to which I was exposed as part of my work at Rocky Flats as an experimental researcher in the Rocky Flats *Critical Mass Laboratory (CML)* that do not, for some reason, appear on DOL's Site-specific list of hazardous/toxic substances. These compounds include:

**boron carbide (a high neutron absorption cross section)**  
**Californium-252, encapsulated**  
**cobalt-60, encapsulated**  
**Gadolinium oxide (a high neutron absorption cross section)**  
**Gerstley borate, a mineral from California (a high neutron absorption cross section)**  
**Polonium-210, encapsulated**  
**polyvinyl chloride (PVC) in both solid and powdered form (a moderate neutron absorption cross section)**  
**sodium tetraborate pentahydrate (a high neutron absorption cross section)**  
**toluene**

Their omission from DOL's list begs the following questions:

Why are they not included on DOL's list of toxic substances used at RFP?  
What was DOL's source in compiling that *incomplete* list?  
Where did DOL get their list?  
Why was one of RFP's main laboratories (CML) overlooked when compiling this list originally?

The CML's use of these substances can be verified at the LANL archives (where 30 year's of records from the RFP CML are housed) in their Collection A-1996-051. a probably more direct way to verify my claims could be obtained from either of the following references:

R.E. Rothe, et al  
"Criticality Experiments in a Poison Tube Tank"  
*Transactions of the American Nuclear Society, Vol. 46*  
New Orleans, Louisiana, June, 1984.

and

R.E. Rothe  
"Critical Experiments on an Enriched Uranium Solution System Containing Periodically-Distributed Strong Neutron Absorbers and an Archival Record of Typical Procedures for Performing Critical Experiments at the Rocky Flats Critical Mass Laboratory."  
*Nuclear Safety Engineering Technical Report NSTR-013-93*  
EG&G Rocky Flats, September, 1993  
and

R.E. Rothe  
"A Survey of Fissile Solution Storage Methods: Champion the Poison Tube Tank."  
*ANS Proceedings of a Topical Meeting on Criticality Safety in the Storage of Fissile*

*Material,*

Jackson, Wyoming, September, 1993

I respectfully request, Dr. Markowitz, that you and your committee look into correcting this omission in the DOL's site-specific list of hazardous chemicals used at Rocky Flats. In particular, I ask you to determine their possible ototoxicity simply because the ototoxicity of trichloroethylene was the fundamental topic of my hearing with the FAB.

Thank you for your attention. May I ask for a response confirming, at least, that this message has been received by you? Tim Lerew, Ombudsman, told me that your committee does not meet frequently.

*Robert E. Rothe*  
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