

## Anonymous Anonymous

The toxicity study (Ecology 2018) that forms the basis for the petroleum hydrocarbon surface water protective values (cleanup standards) has not been published in a peer reviewed journal, nor has it been independently repeated. In short, it has not been subjected to the strict review standards by which research is evaluated by the scientific community. Ecology also did not solicit comment or outside review of a work plan or quality assurance project plan prior to or after conducting the study, nor does it even appear to have gone through the appropriate evaluation required by the Model Toxics Control Act (MTCA) [WAC 173-304-702(15)&(16)]. It is inappropriate for Ecology to implement a new cleanup standard (even as guidance) for petroleum hydrocarbons based on one study alone; it is even more inappropriate for Ecology to implement a cleanup standard based on a study that has not undergone peer review and has not been validated by the scientific community.

Toxicity assessments are typically conducted by compiling and reviewing numerous relevant studies from the scientific literature. The body of scientific evidence is reviewed by experts and a consensus on relative toxicity is reached. In this case there is only one study and the products in question are inherently variable both in their unaltered and weathered forms; it is scientifically inappropriate to derive toxicity and cleanup standards from a single study.