

Testimony Before the Assembly Environment and Solid Waste Committee

Assembly Bill # A2123

“The Unsafe Drinking Water and Unsound Science Act”

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Good afternoon Madame Chair and members of the Committee. Thank you for the opportunity to speak on this extremely important bill, which would negatively affect the quality of the drinking water, air, water, soil, wildlife, and health of all NJ residents.

I am Bill Wolfe, Director of NJ PEER. PEER is a support group for federal and state agency professionals who seek enforcement of environmental laws and ethics.

The bill would do 2 things:

- 1) add 3 representatives of industry to the NJ Drinking Water Quality Institute; and
- 2) revise the procedures and substantive requirements for risk assessment.

While we welcome legislative intervention and oversight of the NJ Drinking Water Quality Institute (DWQI) and DEP's implementation of DWQI recommendations, we must strongly oppose the proposed legislation and urge you not to release the bill from Committee today.

I) Drinking Water Quality Institute Provisions

As you know, the 15 member NJ Drinking Water Quality Institute was established by the Legislature and charged with, among other things, reviewing the science, conducting risks assessment, and recommending drinking water standards for adoption by the DEP.

DEP relies on the DWQI for the scientific basis for “Maximum Contaminant Levels” (MCLs) – or drinking water standards. By statute, MCLs are based on an individual excess cancer risk of 1 in a million.

Successful implementation of those responsibilities requires independent and highly trained scientist, backed by political leadership at DEP acting in the public interest.

The DWQI and DEP's drinking water program have been extremely successful and served as a national model for both US EPA and other state programs.

Unfortunately, however, that national leadership has waned and the DWQI is virtually dead in the water.

The main problems with the NJ DWQI and DEP's drinking water protection programs are:

- 1) The DWQI has met on a quarterly basis for many years. However, under the Christie Administration, the DWQI has not met for over 2 years, since September 2010.
- 2) The DEP has ignored a series of DWQI recommendations to update and strengthen existing standards, and develop necessary new protective drinking water "Maximum Contaminant Levels" (MCL's).
- 3) The DEP denied PEER's petition to regulate over 500 unregulated chemicals that DEP's own sampling has found in the drinking water of thousands of NJ residents.

The DWQI recommendations that have not been adopted by NJDEP are for the chemicals perchlorate (October 2005), radon-222 (February 2009), and Hazardous Contaminants (March 2009).

The 2009 "Hazardous Contaminants" document included recommendations for existing MCLs (recommendations of increase, decrease, or no change for MCL), as well as important new MCL recommendations for 1,2,3-trichloropropane and dacthal.

In addition, the Corzine DEP proposed a new MCL for perchlorate on March 3, 2009, however, DEP Commissioner Martin allowed that proposal to expire without being adopted.

Also, the Committee should know that DEP recently readopted the NJ Safe Drinking Water Act program on January 4, 2011. However, the program re-adoption did not include the 2009 DWQI recommendations for 1) revisions of existing MCLs or 2) new MCLs for 1,2,3-trichloropropane, dacthal, and radon.

The DEP's repeated and longstanding failure to implement the recommendations of the DWQI led to the resignation of the former Chairman, Mark Robson, who expressed his frustration in an NJN TV interview.

As a result of DEP's inaction, the health of thousands of unknowingly exposed NJ residents is needlessly put at risk.

We strongly urge the Legislature to conduct oversight of this pattern of failure by DEP to implement the scientific recommendations of the DWQI by promulgating MCLs.

Even without this pattern of failure by DEP, it would be totally inappropriate to appoint industry representative to the DWQI.

The DWQI affects not only drinking water, but many other important DEP standards.

When DEP adopts a MCL drinking water standard and the risk assessment upon which it is based, the groundwater standards are automatically revised as well.

DEP's adoption of drinking water MCLs, chemical risk assessments, and groundwater standards in turn have direct impacts on not only drinking water, but on surface water quality standards, soil cleanup standards, toxic site remediation requirements, and – depending on the chemical, air pollution control requirements.

Thus, the science and risk assessments done by the DWQI and DEP staff have HUGE impacts on public health and the environment, as well as industry compliance costs.

Accordingly, the provision of the bill putting 3 industry representatives on the DWQI would create a huge conflict of interest, because industry is directly regulated by the DEP standards recommended by the DWQI and must spend billions of dollars to comply with those DEP regulations.

Obviously, industry has huge economic stakes in derailing, delaying and weakening any DEP standards and those conflicts should disqualify them from any scientific credibility or formal regulatory role on the DWQI.

The bill would further the chemical industry's strategy to manufacture uncertainty to block, delay, and weaken environmental and public health regulations – for an outstanding in depth analysis of how the chemical industry has distorted science, see Professor David Michael's recent book **Doubt is Their Product – How Industry's Assault on Science Threatens Your Health**. The book has numerous NJ specific examples, especially on chromium and the shameful history of Dupont, a major player in NJ.

II) Risk Assessment Provisions

Similarly, we believe that the risk assessment provisions of the bill are ill considered, bad science, and imprudent public policy.

The bill would create needless “stakeholder” procedures that would only delay and provide even more undue industry influence of the science of risk assessment and standards development.

The bill would limit risk assessment to “good laboratory practice” (GLP) – however, GLP was developed for other regulatory purposes (i.e. products under federal TSCA and FIFRA) and is not designed or appropriate for limiting the science of risk assessment.

Additional limitations of GLP include:

- Good Laboratory Practices (GLP) applies to laboratory studies and is not applicable to human epidemiology studies, which are the first choice for risk assessment when appropriate studies are available;
- GLP refers to specific requirements for conducting and documenting toxicology studies usually done for specific regulatory purposes such as product registration and excludes many studies of equally high quality and perhaps greater scientific validity; and
- New Jersey DEP employs the same scientific standards as used by the U.S. Environmental protection Agency and EPA does not have a policy of considering only GLP studies in its risk assessments.

I strongly urge the Committee to seek expert testimony on these complex science and regulatory issues before releasing this bill.

I am available to respond to your comments and provided additional information.

Thank you.

Wikipedia:

Criticism of GLP

GLP studies require adequate and permanent documentation of everything involved in an experimental test: staff qualifications, valid study design, standard operating procedures (SOPs), training, performance, formulation and statistical analyses, and the retention of summary/individual data; so that there can be confidence in the study's design, performance and its results, and anyone (as public agencies have access to the GLP records) can subsequently fully reconstruct the study. GLP is by most regulatory authorities worldwide adopted as **the lowest common standard for quality assurance**. ISO 17025, GMP or GCP criteria are alternatives in some cases.

OECD Guideline test methods are recommended by regulatory agencies as study plan to follow for toxicology studies. These methods are all very standardized/extensively peer reviewed, and are adopted worldwide. Independent of the test guidelines, GLP

is recommended by the authorities to assure the correct execution of those study plans. The correct execution of a GLP study is verified by an independent GLP monitoring authority on a regular basis (2-3 yearly). This verification means an in situ inspection of the whole test facility and his connected test sites worldwide. Audits of the studies registered with unrestricted access to all raw data produced during the whole study are a part of the inspection. In this sense it means a much deeper peer review of the study than done for an academic publication.

By contrast, academic scientists perform a wider range of basic/exploratory experimental research to: identify unknown potential hazards of chemicals, elucidate the mode/mechanism of action for known toxicants, and explore novel toxic endpoints. Accordingly, their experimental methods vary greatly in the delivery route of the test chemical, the number of test animals and the range of doses.[4] These test methods are far more varied than the GLP test protocol is; and (at least before peer review) academics do not like to share their results or methods with laboratories competing for grant money or to give insight in raw data produced. These factors make it hard for regulatory agencies to use the results of academic researchers in chemical risk assessment.

The problem is, the regulatory agencies universal requirement that toxicity studies be performed according to OECD/GLP protocols automatically excludes the toxicity results of the independent researchers. The latter's methods, though variable, do test more realistic doses than the OECD protocols use. Thus if they find toxicity at lower doses, that important risk is not included in the risk assessment, due to the GLP requirement. Tens of thousands of published findings of toxicity from chronic toxicity have been excluded from risk assessment, a large fraction of which find toxicity at lower dose than OECD tests. Not all these independent results are high quality, but many are; and critically, they are financially disinterested.

Reviews of toxicity studies have confirmed that this false negative error (a finding of no risk when there is) is common: dozens of reviews have confirmed it for Guideline tests of pharmaceuticals; while for chemicals at least four reviews have found it.[5] In one of those, the toxicity studies funded by the manufacturers of a high volume & well-studied chemical never found low-dose toxicity, but over 90% of its many government-funded studies did.[6] The specific factors that lead to such false negative error by OECD/GLP studies have been analyzed.[7]