Reviewer’s report

**Title:** Proposal for coordinated health research in PFAS-contaminated communities in the United States

**Version:** 0  **Date:** 12 Aug 2017

**Reviewer:** Phil Brown

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The idea of coordinated PFAS research is very important, and this approach of developing a large national study involving all stakeholders is very apt. The authors are well-poised to help develop such a coordinated study, based on their longstanding work on PFAS and their history of bringing together multiple parties on these and other emerging contaminants.

In terms of the common assumption of 6 million people being affected, the authors should consider using the higher level of exposed population that Environmental Working Group uses, 15 million, based on the Clapp and Grandjean safety level of 1 ppt, rather than the EPA level of 70 ppt. The difference in the estimates reflect deep differences in how standards are set. As people in this area of work know, the EPA level was itself lowered recently, and a number of states have set advisory levels much lower than EPA.

There is too much emphasis on PFOA and PFOS, especially since the recent growth of military and airfield sites have shown other PFAS, and also die to very recent attention on the GenX replacement.

At 118, it would help to define and give examples of legacy and current-use PFAS.

In the proposal points, it's not enough to "assess" needs of coms and to "Communicate the approach outlined above to communities." The communities themselves should be involved in developing research plans. It would also be important to emphasize the importance of full disclosure of research findings to participants and affected communities. For the first proposal, who would be tasked with bringing in the experts in the first place?

It would help to mention the amendment to the Defense appropriation bill now going through Congress. We need to think about what agency or agencies should best do that research, and to point out the need to include surrounding civilians, not just military and civilian base personnel. It could be interesting to ask what is the role of Air Force, which has been reluctant to do the type of studies suggested here? The newly appointed CDC/ATSDR director is a former Air Force officer from Wurtsmith AF Base in Michigan, one of the sites where a community group has been very involved. If ATSDR leads, how should they involve NIEHS, which has more experience on large studies that go beyond localities (ATSDR's legacy of studies). Of course, I understand if these points are too much to include in this early phase of putting out on the table the need for a coordinated study.
In terms of the varied scope of existing studies, it might be worth talking about a common platform, similar to the NIH ECHO program that brings together common data from multiple existing children's environmental health studies. This should be viewed not as separate from a nationally coordinated study, but as an additional approach. This is hinted at in the first proposal 142 ff., but it would help to note ECHO in particular.

Typo - li 176 NIEHS - National Institutes of Environmental Health Sciences - plural in "Institutes"

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as mentioned to Philippe Grandjean I have collaborated with the authors

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