



"Pat Ohara"

08/04/2004 02:13 PM

To <gwtf@emsus.com>

cc

bcc

Subject Corrected Comments, DNALP discussion paper

Ken,

Corrected text of our comments on the DNAPL paper follows. Please discard the earlier version sent on 7/30/04. Sorry for any inconvenience....

Ken,

We appreciate the opportunity to review and comment on this discussion paper.

Cummings/Riter is a small consultancy (30 employees) that works on highly challenging groundwater issues involving persistent contaminant at CERCLA, RCRA and Brownfields sites.

Our senior staff all have over 25 years of relevant experience, and we wish to offer the following comments :

1 The paper very well serves the purpose of prompting important dialogue on this topic. Preparing this draft, hosting the web seminar and soliciting comments are major steps towards developing better policy and guidance on the topic.

2. Remedy selection at CERCLA sites, including DNAPL sites, is required to consider 9 Remedy Selection criteria specified by regulation in the National Contingency Plan (40 CFR300.) Discussions of selection of remedy for DNAPL sites under CERCLA are most useful if held in the context of the 9 NCP criteria. New fresh Guidance on how to explicitly assess remedy for DNAPL sites under the NCP remedy selection criteria would be enormously helpful, and for CERCLA sites would do more to help address the 8 "problems" listed in the discussion draft than any other single step. Utilization of the NCP criteria to select remedy is a legal and regulatory requirement under CERCLA, and recommendation as to "how to pick the right remedy" outside of the context of the Regulatory and Statutory requirements for CERCLA remedy selection are more confusing than helpful.

3. Problem Statement 3 is erroneous. There is no federal law or regulation that limits the adoption of alternative cleanup goals to delineated DNAPL source zones. There is a clear misunderstanding of law and regulation on the part of some regulators. Additional training of regulators may be helpful in eliminating this "problem."

4. Problem 4 states that alternate cleanup goals have uncertain reliability and long-term costs. This certainly is true. However, Goals that mandate aquifer restoration at DNAPL sites usually result in remedies that have even higher uncertainties in reliability (as regards if and when full aquifer restoration will be accomplished) and even higher uncertainty in long term costs. What is certain is that when unrealistic goals are mandated, costs are always higher and protectiveness is not necessarily improved when unattainable goals are mandated.

5. Problem 6 is a gross oversimplification. The advantages and disadvantages

of source depletion can only be fairly weighed on a site specific basis. Any attempt to apply generalities to this issue is fraught with peril. At CERCLA sites, the NCP requires assessment of these issues in a structured site specific assessment (Feasibility Study.)

6. Under Option 4 to address Problems, the discussion indicating that these policies can only be applied to delineated DNAPL zones is erroneous. There are no federal laws or regulations that limit use of alternate cleanup levels to delineated source DNAPL zones. However, the NCP can be fairly interrupted to prohibit selection of cleanup remedies that are not practicable. Congress never intended EPA to mandate impracticable cleanups.

7. This disadvantages listed under Option 8 are not justification for not developing this guidance. The comparison of advantages and disadvantages of various remedial alternatives, including 30 year life cycle costs of monitoring and institutional controls is a required routine component of CERCLA feasibility studies. Whether or not there is consensus on these issues is not really relevant, practitioners have been required to do these comparative analyzes for 2 decades at CERCLA sites as a requirement of 40CFR300. Developing guidance that includes some of the lessons learned on costs incurred would be quite helpful.

8. One of the potential disadvantages of source depletion is that some strategies could reduce mass but actually increase contact area (and flux) between the DNAPL and the aquifer. In such an instance the benefits of mass reduction (shorter period of contamination) must be weighed against increased flux into the aquifer due to the increase in contact area. The potential for this concern must be assessed on a site specific basis.

In closing, the discussion paper will clearly serve to increase dialogue regarding this very important topic. The GWTF should be acknowledged for their excellent effort to stimulate and assess productive discussion of these matters. We citizens and our resources are well served by this effort.

All the very best

pat

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07/30/2004 04:54 PM

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Subject Comments on GWTF Draft Discussion Paper, Groundwater Use, Value and Vulnerability

Ken,

We appreciate the opportunity to review and comment on this discussion paper.

Cummings/Riter is a small consultancy (30 employees) that works on highly challenging groundwater issues involving persistent contaminant at CERCLA, RCRA and Brownfields sites.

Our senior staff all have over 25 years of relevant experience, and we wish to offer the following comments :

1 The paper very well serves the purpose of prompting important dialogue on this topic. Preparing this draft, hosting the web seminar and soliciting comments are major steps towards developing better policy and guidance on the topic.

2. With all due respect, I don't believe that Problem Number 2 as stated in the discussion paper is really a problem.

In 30 years of practice, I have never yet seen any regulatory agency specify exposure controls (only) as the remedy for an aquifer when clean-up (restoration) was practicable. I have seen a number of instances when agencies have specified full aquifer restoration to either MCLs or background when such a cleanup was impracticable.

Mandating impracticable cleanups is fortunately no longer typical regulatory practice. This is fortunate because remediation resources are not being applied as inefficiently as in the past when impracticable remedies were more common. Also, the reputation of the federal cleanup programs has improved as remedies have become more practicable.

Education of stakeholders as regards what really can and cannot be achieved as regards groundwater cleanup is of vital importance. Statements such as those made in Problem 2 of the discussion paper leave a false impression that cleanups of groundwater are typically readily achievable, and that clever negotiators talk the regulators out of active cleanup when such cleanups are Practicable. This has not yet been my experience in 30 years of practice, and I would be curious to compare my experience with other practitioners.

In closing, the discussion paper will clearly serve to increase dialogue regarding this very important topic. The GWTF should be acknowledged for their excellent effort to stimulate and assess productive discussion of these matters. We citizens and our resources are well served by this effort.

All the very best

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