

February 24, 1997

To: PCCE
From: Dr. B.F. Rowell
Subject: OU-4, Groundwater at Palmerton, PA

In response to your recent request, I have formulated the following questions concerning OU-4. These questions pertain to: EPA Region III Contract 68-W8-0091 - entitled "Palmerton Zinc Pile Site RI/FS Groundwater/Surface Water OU" dated 1993, prepared by B&V Waste Science and Technology Corp.

1. Will EPA require all contractors to comply with PADEP Groundwater Protection and proposed (draft) Pennsylvania wellhead protection regulations?
2. Is a feasibility study for OU-4 practical in light of the fact that remediation of OU-2 has not been completed?
3. Does the EPA feel that 50 new well locations (88 wells) are adequate to categorize the hydrologic variables in both shallow and deep aquifers in the Palmerton area?
4. How were the tentative number and location of wells for figures 8-1 and 8-2 determined, if 7.1.2.1 recommends that data from existing wells should be evaluated before the location and depths of new monitoring wells are defined?
5. Is it practical to bring shallow groundwater resources into compliance with surface water and drinking water standards without significant modification of surficial materials?
6. Has the EPA considered re-categorizing water quality standards for the upper aquifer from Class IIA (current sources of drinking water) to Class III (groundwater not a potential source of drinking water and of limited use)?
7. Is water quality data from existing, deep, bedrock wells currently available to the public? If so through what means?
8. Does test data on water from existing deep, bedrock wells illustrate a pattern of diminishing quality over time?

9. Is there any evidence of groundwater contamination exceeding drinking water standards in the lower (bedrock) aquifer?
10. Is it necessary to know the geographic extent of groundwater contamination in the deep, bedrock aquifer if water quality in currently used aquifers has not been degraded?
11. Has the EPA required a contingency aquifer test plan in the event that the deep, bedrock aquifers may initially produce flowing artisan wells?
12. What criteria will be used to define "no contamination" in section 3.6.3 as a means test to omit pump testing?
13. What procedures and precautions does EPA plan to implement to assure that the Palmerton water supply does not become contaminated as a result of the groundwater testing proposed.
14. What is the probability that contamination of the deep aquifer will occur as a result of the proposed groundwater testing.