

MEMORANDUM

April 4, 1994

TO: Arthur Pinchev
Helen E. Zukin

FROM: Joel I. Cehn, (510) 268-1571, or 914-6262

RE: **Sampling of Rockwell's Wells on Institute Property**

Per our discussion, I spoke with Pam Blandino at Rockwell about our independent or split sampling of the wells and springs on BBI property. She is willing to cooperate with us and is waiting for our specific plans. I have drafted the attached sampling plan. We can finalize it and then present it to Pam.

There are four monitoring wells installed by Rockwell on the Institute side of the property line. Two are cluster wells (RD-33A, B & C, and RD-34A, B & C.) Two are single wells (RD-57 and RD-56, just installed.) Another well (RD-59) is planned for later this year. Last year, tritium and chemicals (TCE, DCE) were detected in RD-34. TCE was also detected in RD-33. RD-56 and 57 were not in place last year.

In addition to well monitoring, Rockwell also routinely samples 7 springs on Institute property. These are generally located along the bottom of the hill. No contamination has been detected in any of these springs. Nevertheless, I am recommending split and independent sampling by the Institute.

My proposal calls for BBI sampling of the wells in May, when Rockwell's contractor is doing their sampling. This is because the wells contain integral pumps. I would prefer that Rockwell's people operate these pumps. I would accompany them and collect our samples. With respect to the springs, Rockwell isn't scheduled to sample them again until August. I would again accompany Rockwell's people and split water samples with them.

Please review the sampling plan. Pam should be aware of our plans by the end of April, if I am to do the sampling in May.

Cobalt-60 in Well #RD-34

In my last memo (March 20th), I mentioned that I was reviewing Rockwell's 1993 groundwater monitoring report. One result that caught my attention was cobalt-60 detected in well #RD-34. Phil Rutherford at Rockwell told me that this sample was re-analyzed by their lab (by gamma scan) and cobalt-60 was not detected the second time. This is consistent with the fact the water samples are filtered prior to analysis. Cobalt-60 is almost always found in particulate form, not in solution. So I would have been surprised to see it in filtered groundwater. However, this is another reason for us to take our own samples at these wells.

A handwritten signature in blue ink, appearing to be 'J. Cole'.

PROPOSAL FOR BBI SAMPLING OF WELLS AND SPRINGS

WELLS: RD-33A,B & C
RD-34A,B & C
RD-56
RD-57

SPRINGS: OS-1,-2,-3,-4,-5,-8,-10

DATES: Sample wells with Rockwell's 2nd quarter scheduled sampling (about May)
Sample springs with Rockwell's 3rd quarter scheduled sampling (about Aug.)

ANALYSES: Tritium, strontium-90, and gamma scan on all wells and springs

SPLIT

SAMPLES: Rockwell's sampling schedule shows springs OS 1 through 5 scheduled for tritium and gamma scans in the 3rd quarter. We propose splitting these samples with Rockwell.

April 4, 1994