

KAFB 943 ENTERED

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GROUND WATER BUREAU

Mr. Steve Zappe
State of New Mexico
Environment Department
Harold Runnels Building
1190 St. Francis Dr. POBox 26110
Santa Fe, NM 87502

Mike Silva
BDM International
1133 N. Main
Layton, UT 84041
(801) 544-3784



May 18, 1994

RE: Kirtland AFB: Sewage Lagoons and Golf Course Pond Post Closure Plans

Dear NMED,

I would like to make a few comments related to the referenced post closure plan. Although I have not reviewed the post closure plan, I am intimately familiar with the series of successive closure plans prepared earlier since I wrote these closure plans on behalf of AFB as a contractor to KAFB through Geoscience Consultants Limited (GCL). I have recently relocated to Utah but I am very much interested in the activity associated with these units. I am not requesting a public hearing but I would like to stay abreast of final closure actions and be placed on the mailing list. The following comments are mainly concerned with the Chromium Issue:

If my memory serves me correctly, Chromium was one of the contaminants of concern in the original compliance action, how do the values and type of Chromium compare to the levels in the pond and lagoon liquids and sludge? Has the valence been documented? Is it Chromium 3 or Chromium 6?

Apparently NMED believes that the source of the Chromium is from the lagoons and pond. Has anyone considered that it may be naturally occurring? or is from some other source? I submit that the Chromium values being seen are naturally occurring in this area with the origin being the historical upgradient water sources located in the Rio Grande basin and sediment containing Chromium being transported and dissolved in the Tijeras Arroyo drainages. I suggest that NMED use their resources and existing database of information to investigate the Chromium as part of a larger regional issue. Has anyone focused on data trends (increase or decrease over time) of Chromium as related to these sites? If the trend is increasing and the lagoons have been shut down since 1987 perhaps the chromium is being supplied by some other source. It seems foolish to focus on such a small issue of a single contaminant at a closure site when low levels may naturally exist in the area.

Wasn't the original closure initiated for organic contamination? It seems that in this case the focus has now shifted to Chromium contaminants that were able to migrate 480 feet through a vadose zone and then significantly contaminate ground water in the same spot that organic contamination was not able to do the same! Has anyone evaluated the drill logs from the perimeter wells at both sites to determine if the vadose zone conditions are sufficient to allow Chromium transport to the water table without first being attenuated by 480 feet of unsaturated zone? Entertaining the notion for this to occur to me seems



pretty far fetched at best. Has anyone conceived of the magnitude, feasibility and cost of cleaning up chromium on a regional ground water scale?

Using sanitary effluent for golf course and grass watering has been an effective waste water management tool nationwide for quite a few years. Waste water management of this type is also an effective way of both conserving ground water resources and extending local sewage treatment plant design life. The nutrients in this water also allow less fertilizer to be used. This system was one that worked effectively as indicated by the lack of contaminants found at the golf course. The way that NMED has pursued the closure of this viable system is entirely contrary to the bigger perspective of regional water conservation in the Albuquerque basin. My understanding is that the groundwater levels are decreasing at about a foot per year. Certainly watering golf courses with fresh groundwater pumped from wells is not helping control this decline.

The entire basis of how these units first became a compliance issue is a farce resulting from inappropriate calculations and broad generalizations based on a one time, one spot grab sampling event. The type of sampling protocol originally used to support this whole compliance action would not stand up to the industry standard SW 846 quality assurance scrutiny and representative sampling protocol that had to subsequently be used throughout the remaining history of these sites. It is too bad that the then NMEID did not stand down on their position in front of EPA and defend KAFB on this compliance action when they first learned of this significant calculation error and admit a mistake had been made.

Since the final closure of these units is so close to completion, NMED should evaluate their position and not be afraid to move to the decision to allow clean closure with the limited post closure monitoring and be done with it as soon as possible.

From a taxpayers perspective, I feel that sufficient resources have been wasted on this compliance issue and to use a phrase: this dead horse has been beaten long enough. NMED needs to check this one off and focus on solutions to other, bigger problems facing the citizens of New Mexico.

Sincerely,

Mike Silva

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