



MARK S. COLEMAN
Executive Director

FRANK KEATING
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

October 24, 1997

S. Jess Larsen , Vice President
Cimarron Corporation
P.O. Box 25861
Oklahoma City, Oklahoma 73125

Dear Mr. Larsen:

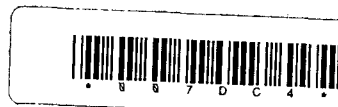
The Department of Environmental Quality (DEQ) has reviewed the "Work Plan for a Risk Assessment for Groundwater," submitted by Cimarron Corporation. DEQ had a few comments that can be addressed in the future risk assessment document submitted for our approval. Please proceed to complete work on this document. Our comments are listed below:

1. Section 2-2 mentions criteria for addressing contaminants of concern. It may be that the Technetium is not actually measured in more than five (5) percent of the samples (because of failure to identify this as the reason for the unusual ratio of alpha to beta). However, this contaminant still needs to be included in the radiological portion of the risk assessment.

2. Section 3-1 mentions that the trespasser scenario is unlikely; however, in the area below the bluffs and between the bluffs and the river, some sort of pasture grasses are cultivated. Occasional exposure to the water from those seeps by a farm worker should be included. This occasional exposure does not need to include drinking the water from the seeps, but it is possible that a farm worker could have dermal exposure to those seeps. Is the fencing in that area sufficient to prevent this? It appeared that the access to the cultivated areas might be through the area near the seeps.

3. Section 3-2 use of the ninety-five (95) percent UCL is appropriate, but it is unclear as to what the statement "the site will be used as the basis for evaluation in the risk assessment" refers. By the site, are we including the Cimarron River and its alluvium?

4. Pages 3-5 list some default assumptions for food consumption. It is recommended that a larger consumption of fish be included in the risk assessment to account for subsistence fishers. The Draft Revision to the Exposure Factors Handbook lists a weighted mean consumption of fish in grams per day of 58.7 g/day. This amounts to 21 kg/year, assuming 350 days worth of fish consumption (Table 2.35). This is an estimate for a Native American population of subsistence fishers. Use of this estimate may be very conservative, and some sort of adjustment for other sources of fish rather than the Cimarron River should possibly be included. The Draft (NCEA-W-005) is not formal guidance, but can be used in particular instances to provide updated exposure estimates.



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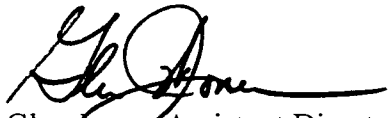
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5. The summary proposed to use published toxicological benchmarks for ecological receptors. If those published data are from peer reviewed journals or publications, those publications should be referenced. If the references are not readily available, copies of the papers should be provided for review along with the risk assessment.

As you develop the assessment, please keep in mind the need to reach consensus with the U.S. Nuclear Regulatory Commission (NRC) concerning the acceptable groundwater cleanup level for radionuclei.

Any questions about these comments should be addressed to Ms. Mary Jane Calvey at (405) 271-5338, or to Mike Houts at (405) 271-7889.

Respectfully,

A handwritten signature in black ink, appearing to read "Glen Jones", with a stylized flourish extending from the end.

Glen Jones, Assistant Director
Water Quality Division

cc: Kenneth Kalman, NRC