



ARKANSAS
Department of Environmental Quality

MEMORANDUM

TO: Bruce Kirkpatrick

THROUGH: Keith Brown *KB*

FROM: Laura Stuart *LS*

DATE: May 2, 2002

SUBJECT: EL DORADO CHEMICAL – GROUNDWATER

Robert and I met with Randall Whitmore of EDCC on 3/6/01 and discussed the groundwater situation at the plant.

- 1). The bioremediation pilot study required under CAO 98-119 wasn't feasible and the study was terminated by their consultant.
- 2). The previous site investigations were inadequate, especially the lack of groundwater monitoring and geological data, and we talked about additional study at the plant.
- 3). We agreed to: semi-annual groundwater sampling of the existing 18 wells at the plant with analysis for pH, specific conductivity, temperature, lead, ammonia, nitrate, sulfate, TDS, and chromium; cross sections of the geology; and isoconcentration maps of contaminants.

Sampling was completed last year and a report was submitted in February 2002. The report has been reviewed and comments will be issued within the month.

Due to the lack of previous data, there is little information about the extent and level of contamination at the plant, and I anticipate additional monitoring and sampling of the groundwater will be needed. From two sampling events last year, the levels for nitrates, sulfates and TDS exceed MCLs or secondary MCLs.

Also, additional geological work will be needed to determine the hydraulic connections between the surface water, the surface impoundments and the underlying shallow aquifer, prior to making a determination on clean-up.