

ORRES. CONTROL
UTGOING LTR NO.

DE ORDER 5400.1

94 RF 03885



EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000



000024161

DIST.		
BARAL, M.E.		
BRMAN, H.S.		
BRANCH, D.B.		
BRNIVAL, G.J.		
BRPP, R.D.		
BRVIS, J.G.		
BRREHA, D.W.		
BRNNI, B.J.		
BRMAN, L.K.		
BRALY, T.J.		
BRDAHL, T.		
BRBIG, J.G.		
BRITCHINGS, N.M.		
BRLL, R.E.		
BRHEZ, W.A.		
BRSEYER, A.W.		
BRHAFFEY, J.W.		
BRINN, H.P.		
BRRX, G.E.		
BRDONALD, M.M.		
BRKENNA, F.G.		
BRONTROSE, J.K.		
BRJORGAN, R.V.		
BRITTER, G.L.		
BRZUTO, V.M.		
BRING, T.L.		
BRNDLIN, N.B.		
BRFLOCK, G.H.		
BRWARD, D.L.		
BRIGER, S.G.		
BRLLIVAN, M.T.		
BRANSON, E.R.		
BRKRINSON, R.B.		
BRLSON, J.M.		
BRANT, R.D.		

April 5, 1994

94-RF-03885

F. R. Lockhart
Environmental Restoration Division
DOE, RFO

CHANGES IN OPERABLE UNIT 4 PHASE I REMEDIATION DELIVERABLES AND SCHEDULES - SRK-063-94

Ref: ER:FRL:03465

The Interagency Agreement (IAG) Decision Document being prepared for the Solar Ponds Operable Unit 4 Phase I remediation is intended to address the source of contamination and the OU soils, with ground water remediation deferred to the Phase II activities. In developing the Phase I design, however, it has become clear that some potential ground water effects must be addressed at this time to ensure successful closure of the ponds. The Joint Working Group's understanding of this issue has been evolving, and several attempts to resolve concerns using very simple, though very conservative, models have been unsuccessful. We share DOE's frustration at the length of time it has taken to thoroughly define the issue.

It is important that you recall the information concerning ground water impacts transmitted to you to date. At the February 9, 1994 working session, EG&G's subcontractor presented results from a very conservative analysis which was based on the solid/liquid partition coefficient (K_d) and an assumption that all soils contained the 95% upper confidence interval contaminant concentrations. Use of this unsophisticated model was justified by its simplicity and the incontrovertible nature of its results. Unfortunately, this conservative approach predicted unacceptable leachate concentrations. After presentation of this model's results, the working group agreed that the analysis should be performed again with more realistic parameters.

The status of the second analysis were presented at the February 15, 1994, working sessions. Concerns were voiced that successful application of the model required use of K_d values which, while fully within the range of applicable values extracted from the literature, were nonetheless near one extreme of the range. The group concurred that decision-making based upon such values would not be appropriate since critics could attack the decision simply by arguing that values nearer the middle of the range would be more appropriate. Further, EG&G suggested that the Colorado Department of Health (CDH) modify its success criteria to consider interaction of ground water with the leachate. On February 17, 1994, CDH transmitted it's position that the modeling could allow the first point of human contact to be the point of compliance at the toe of engineered barrier.

With this information and another conservative model which was not dependent upon K_d values, EG&G's subcontractor executed another analysis and presented the results in Part IV (Section IV.10.4) of the Interim Measure/Interim Remedial Action Environmental Assessment Decision Document. This roundtable review draft of this document was transmitted to the DOE on March 1, 1994.

R. Keith X
HARRISON, E.L. X

7/10 (2)

ORRES CONTROL	y	y
MIN RECORD/080	X	
AFFIC		
ATS/T130G	X	

CLASSIFICATION:	
UNCLASSIFIED	
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER
SIGNATURE

DATE

IN REPLY TO RFP CC NO:
94RF01217

SECTION ITEM STATUS
 PARTIAL/OPEN
 CLOSED

APPROVALS:

PREP & TYPIST INITIALS
ck: Clk

In response to your request, EG&G provided a complete and detailed discussion of the potential ground water issue on March 29, 1994, as part of the weekly meeting with the regulators. Follow-up activities were identified in that meeting, for example, there is a CDH task to recommend which ground water standards should be used. The ground water issue could result in costly modifications to the baseline design, and resolution of the issue to the satisfaction of DOE, CDH, and Environmental Protection Agency (EPA) is important to EG&G's efforts.

We are prepared to brief you on the specific schedule impacts of the ground water issue and the questions that remain to be answered. Please call me or Andy Ledford, extension 8673, to discuss the issue further.



S. R. Keith
Program Director
Solar Pond Projects
EG&G Rocky Flats, Inc.

Orig: and 1 copy - F. R. Lockhart

cc:
S. Howard - DOE, RFO
S. R. Surovchak - DOE, RFO
M. A. Witherall - DOE, RFO