DOE ORDER #
94 RF 01543

DIST.	LTR	ENC
AMARAL, M.E.		
BENEDETTI, E.		
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
COPP, R.D.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HEDAHL, T.	X	X
HILBIG, J.G.		
KIRBY, W.A.		
KUESTER, A.W.		
MANN, H.P.		
MARX, G.E.		
McDONALD, M.M.		
McKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.	X	X
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J.H.		
RISING, T.L.		
SANDLIN, N.B.		
SETLOCK, G.H.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.		
WILLIAMS, S. (ORC)		
WILSON, J.M.		
WYANT, R.E.		
Sheer, S	X	
Freehling, M	X	
Beeler, D	X	
Hollowell, L	X	
Hersinger, D	X	
Cooke, S	X	
File (2)	X	X
ERM Rec (6)	X	X
CORRES CONTROL	X	X
ADMIN RECORD		
PATS/T130G		
TRAFFIC		

CLASSIFICATION:

UCNI		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE
DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

DATE

IN REPLY TO RFP CC NO: 00414 RF94

ACTION ITEM STATUS
☐ PARTIAL/OPEN
X CLOSED

LTR APPROVALS:

ORIG & TYPIST INITIALS
DEF:bep

RF-46469 (Rev. 7/93)

EG&G ROCKY FLATS

000021538

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

February 4, 1994

94-RF-01543

F. R. Lockhart
Environmental Restoration Division
DOE, RFO

904 PAD COMPLIANCE STRATEGY - SRK-025-94

As directed by your letter (01226) of January 28, 1994, a review of the March 1993 904 Pad Compliance Plan has been undertaken.

Conditions contained within that compliance plan have changed since the plan was issued. Those changes are as follows:

- Rather than storage of processed pond sludge in half crates, the sludge is being stored in RCRA compliant tanks on the 750 pad.
- The current strategy is that processing of the pond sludge will not commence until a waste repository is available and the processing rate will be such that the storage of the stabilized waste form will be for a short period only. The current anticipated start of processing of remix is FY01.
- Recent analyses of the stored pondcrete have shown that 16 of 29 samples failed the U.S. EPA Manual SW 846 Method 9095 Paint Filter Liquids Test.
- The deterioration of the saltcrete TRIWALLS and the "slumping" of the pondcrete TRIWALLS has resulted in a number of TRIWALLS that have elongated into a shape that may require larger overpack containers than previously planned.
- The saltcrete generation rate over the last year has been at 240 half crates per year versus the assumed rate in the original study of 360 per year.

An analysis of the regulatory issues was conducted using the logic chart of the March 1993 compliance plan (fig 8) and the applicable Colorado Hazardous Waste Regulations (CHWR). Attached is a listing of the pertinent CHWR regulations that apply to the 904 pad. The principal conclusions reached are:

- TRIWALLS are not suitable containers given their current condition and the expected start of remix processing.
- The presence of free liquids in the pondcrete brings to fore the issue of secondary containment. It is noted the Interim Status CHWR , Part 265, have no proscriptions with respect to secondary containment, while Part 264 does.
- In view of the free liquid contained in the pondcrete TRIWALLS, plastic wrapping or rebagging by itself will not provide suitable containment and does not qualify as DOT approved containers, thus option 2b of the study will not be considered further.

The conclusion reached is that Method 3 of the study is the means of reaching RCRA compliance on the 904 pad with some added actions as follows:

- An initial civil engineering report indicates that stacking up to 3000 lbs per square foot is acceptable. Stacking will be required for maximum use of the existing floor area of the tents . This will require load equalization under each stack and will permit up to 5 high where tent curvature, structure, utilities, and container stability permit. These concerns will have to be finalized.

- Given the various shapes and container conditions, conceptually a sorting of the TRIWALLS will be required. For the pondcrete TRIWALLS given the question of free liquid, the use of an absorbent will be investigated. The pondcrete TRIWALLS remaining will be over packed into half crate sized containers. For the TRIWALLS containing saltcrete since there is not an apparent problem with free liquids, a similar approach will be used except that absorbent will not be used. The sorting criteria and use of absorbent will be provided in the final plan.

- In order to ensure the most effective use of the available existing space, a revised detailed CAD layout is being developed.

- Free liquid concerns for compliance with the Part 265, Interim Status would appear to be met, but the conditions of the Part 264 require further assessment. This issue needs to be further examined by EG&G and an agreement made with DOE/RFO on the advisability for providing secondary containment to meet Part 264 requirements at some future date. It is noted that removal of free liquids by absorbent as specified in CHWR section 264.314 would appear to remove any free liquid concerns.

As there are changes to the conditions specified by the March 1993 study and other issues which need to be resolved, the cost and schedules requested can not be provided at this time. However, a revised compliance plan including the detailed schedule and costs will be provided on or before February 28, 1994. The supporting schedule to develop the compliance plan has the following short-term actions:

Activity	**Due**
Develop container short-list	2/09/94
Develop CAD layouts and iterate with team	2/17/94
Prepare paragraph-by-paragraph explanation of how plan will meet container storage regulations of 6 CCR 1007-3	2/17/94
Repack analysis to identify goals, operational needs, sorting criteria for waste, and plan for handling	2/17/94
Develop commitment schedule	2/23/94
Senior Management review and approval	2/25/94
Transmittal to RFO	2/28/94

Please contact me at extension 8541 or Don Ferrier, extension 8568, with any questions or concerns on this matter.

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

DRF:bep

Attachment:
As Stated

Orig. and 1 cc - F. R. Lockhart

cc:
S. Howard
M. A. Witherill

Summary of RCRA Container Storage Requirements

TYPE OF CONTAINERS

A. INTERIM STATUS REQUIREMENTS (Part 265, Subpart I):
   i. Not Specified
B. PERMITTED UNIT REQUIREMENTS (Part 264, Subpart I):
   i. Not Specified
C. TYPICAL RFP PERMIT CONDITION(S)
   i. 55 gallon drums or other DOT approved containers

CONDITION OF CONTAINERS

A. INTERIM STATUS REQUIREMENTS (Section 265.171):
   i. Container must be in good condition (no rusting, structural defects or leaking) or
   ii. waste must be transferred to another container or managed in another way to comply with the container regulations.
B. PERMITTED UNIT REQUIREMENTS (Section 264.171):
   i. Same as interim status
C. TYPICAL RFP PERMIT CONDITION(S)
   i. Same as interim status

COMPATIBILITY OF WASTE WITH CONTAINERS

A. INTERIM STATUS REQUIREMENTS (Section 265.172):
   i. Container must be made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.
B. PERMITTED UNIT REQUIREMENTS (Section 264.172):
   i. Same as interim status
C. TYPICAL RFP PERMIT CONDITION(S)
   i. Same as interim status

INSPECTIONS

A. INTERIM STATUS REQUIREMENTS (Section 265.174):
   i. At least weekly, the owner or operator must inspect areas where containers are stored,
   ii. looking for leaking containers and
   iii. for deterioration of containers caused by corrosion or other factors
B. PERMITTED UNIT REQUIREMENTS (Section 264.174):
   i. Same as interim status, except also have to inspect containment system
C. TYPICAL RFP PERMIT CONDITION(S)
   i. Same as permitted unit requirements

AISLE SPACE REQUIREMENTS

A. INTERIM STATUS REQUIREMENTS (Section 265.35):
   i. Must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.
B. PERMITTED UNIT REQUIREMENTS (Section 264.35):
   i. Same as interim status
C. TYPICAL RFP PERMIT CONDITION(S)
   i. 26 inch aisle between double rows of drums with an aisle space of 10 feet at the beginning of each row for forklift access

M. J. Freehling
2/3/94

STACKING RESTRICTIONS

A. INTERIM STATUS REQUIREMENTS (Part 265, Subpart I):
   i. Not Specified
B. PERMITTED UNIT REQUIREMENTS (Part 264, Subpart I):
   i. Not Specified
C. TYPICAL RFP PERMIT CONDITION(S)
   i. Crates will be stacked no more than 3 high, drums will be stacked no more than 3 high.

FREE LIQUIDS

A. DEFINED AS (SECTION 260.10):
   i. "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure
B. IMPLICATION FOR CONTAINER STORAGE (Section 264.175):
   i Permitted units with free liquids must have secondary containment

SECONDARY CONTAINMENT REQUIREMENTS

A. INTERIM STATUS REQUIREMENTS (Part 265, Subpart I):
   i. None
B. PERMITTED UNIT REQUIREMENTS (Section 264.175):
   Secondary containment must be:
   i. free of cracks or gaps,
   ii. sloped unless containers are elevated,
   iii. contain 10% of the capacity of the containers or the volume of the largest container (whichever is greater),
   iv. run-on to the containment system must be prevented, unless the collection system has sufficient excess capacity to contain the run-on.
   v. spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as possible to prevent over flow of the collection system
   vi. Generally, areas that store containers without free liquids do not need secondary containment provided that the storage area is sloped and the containers are elevated
C. TYPICAL RFP PERMIT CONDITION(S)
   i. Secondary containment provided by metal catch basins coated with epoxy paint or other coating unless fabricated from stainless steel or FRP.
   ii. Secondary containment can also be provided by a bermed concrete floor, free of cracks or gaps and coated with epoxy paint in good condition or another coating offering equivalent protection approved by the Director.