

EG&G ROCKY FLATS



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

9 RF 2596

April 1, 1992

92-RF-2596

Robert M. Nelson, Jr.
Manager
DOE, RFO



Attn: J. K. Hartman

750/904 PAD RUNOFF REGULATORY ASSESSMENT TECHNICAL REVIEW (00820)-
JMK-0208-92

We have reviewed the 750/904 Pad Runoff regulatory assessment attached to the above referenced letter (D. P. Simonson ltr (00820) to J. M. Kersh, 750/904 Pad Regulatory Assessment Action Closure, January 28, 1992). As your staff requested at a meeting held on March 2, 1992, technical comments are provided below:

I. Regulatory Analysis

A. National Pollutant Discharge Elimination System (NPDES)

In our opinion pad runoff may be considered a non-hazardous solid waste and thus regulated as stormwater under NPDES where:

- 1) the runoff does not exhibit any of the hazardous characteristics of the Resource Conservation and Recovery Act (RCRA) Part 261 Subchapter C; and
- 2) the runoff has not mixed with any listed Subchapter D hazardous constituents known to have been released from stored waste on the pads.

Recent analytical data indicates that the runoff does not exhibit any hazardous characteristics. However, we cannot be certain whether historical spills of potential listed wastes on the pads have been cleaned sufficiently to make an affirmative declaration as to the mixture rule's application. After the pads are sealed, the historical spill residuals, if any, will no longer present a mixture rule issue. At that time, all routine runoff events should be within the boundaries of a stormwater discharge.

We disagree with the statement that pad runoff is somehow regulated under NPDES "because its discharged through an NPDES point source to the waters of the United

DIST.	LTR	ENC
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
BURLINGAME, A.H.		
CARNIVAL, G.J.		
COPP, R.D.		
CROUCHER, D.W.		
DAVIS, J.G.		
EVERED, J.E.	X	
FERRERA, D.W.		
GOODWIN, R.	X	
HANNI, B.J.		
HAPMAN, L.K.		
HEALY, T.J.		
HILBIG, J.G.		
DEKER, E.H.		
KERSH, J.M.	X	
KIRBY, W.A.		
KUESTER, A.W.		
KRIG, D.		
LEE, E.M.	X	
MAJESTIC, J.R.		
MARX, G.E.		
MCDONALD, M.M.		
MORGAN, R.V.	X	
POTTER, G.L.	X	
PIZZUTO, V.M.		
SANDLIN, N.B.		
SHEPLER, R.J.		
SULLIVAN, M.T.		
SWANSON, E.R.		
TALLMAN, K.G.		
WIE, S.		
WILSON, J.M.		
YOUNG, E.R.		
ZANE, J.O.		
Wingo - FH	X	
Kennedy - CE	X	
Trubert - AL	X	
Strich - PW	X	
Winnings - NM	X	
Roberts - CD	X	
Church - AA	X	
Leary Frost	X	
Whisen - ML	X	
Ulman - DJ	X	
Boake - S.O.	X	
Beura - R	X	
Winnings	X	
CORRES CONTROL	X	X
TRAFFIC		

CLASSIFICATION: *Kersh, J.M.* X

UNCLASSIFIED	X
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER SIGNATURE

[Signature]

DATE: *3/25/92*

REPLY TO LTR: *RF-92-01192*

APPROVALS: *[Signature]*

DRIG & TYPIST INITIALS: *[Signature]*

ADMIN RECORD

States." RCRA at 40 CFR Section 261.4 states that "materials that are not solid wastes ...industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the CWA as amended" (emphasis added). In addition, a regulatory comment states that "this exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment." It is evident that this RCRA solid waste definition exclusion is limited to effluent from the actual NPDES discharge point and does not apply to waters or discharges upstream of the permitted discharge point(s). (This interpretation is supported by the fact that the discharge ponds are recognized SWMUs.) Therefore, any potential RCRA treatment or storage unit upstream of the point of NPDES discharge is unlikely to fall within the coverage of the NPDES discharge protection, and thus the RCRA exception cannot apply.

In addition, the U. S. Department of Energy (DOE) assessment implies that the NPDES permit process, which identified the pads or pondcrete as a potential contaminant source, provides regulatory coverage of pad runoff. This view may be supported by asserting that the 750/904 Pad Runoff is regulated under NPDES because the 1980 NPDES Permit Application identified the solar ponds (from which pondcrete was developed several years later) as potential sources of site contaminants. Additionally, the 1988 NPDES Permit Application specifically identified the pads and pondcrete as a potential source of site contaminants. EG&G Rocky Flats, Inc. differs with this view based on the following reasons:

- 1) The 1980 NPDES Permit Application (and 1984 modification) which identified the solar ponds as a potential site contaminant source was:
 - a) prior to the effective date of RCRA's interim status requirements, and;
 - b) cannot be rationally related to the pond sludge's subsequent formation into pondcrete and storage at other locations within the Plant's several drainages.
- 2) The 1988 NPDES Permit Application identifying the pads and pondcrete as potential sources of contaminants has no legal effect since the Environmental Protection Agency (EPA) has neither granted a permit reflecting that pad runoff is exclusively subject to NPDES, nor has it implicitly communicated a view accepting that proposition.

While we agree that the EPA should be updated with the recent runoff data, any satisfaction of NPDES permit notification requirements for process modifications would not be indicative of the runoff's regulatory status.

Therefore, with some modifications, we support the forwarding of Attachment I (of the above referenced letter) to EPA after completion of the pad upgrades (discussed below).

B. RCRA

The assessment's RCRA analysis did not address the impact that the mixture rule and/or the contained-in policy would have in connection with determining the runoff's regulatory status. Where precipitation runoff contains any quantity of spilled (or residual) listed wastes, that runoff is presumed to be a hazardous waste. While contact time may be a significant issue in creating hazardous characteristic wastes, it is a conceptually minor factor under either a mixture rule or contained-in policy regulatory analysis. While it is true that recent pad management practices minimize precipitation contact with stored wastes, the uncovered portions of the pads may contain residuals of the numerous historical spills which occurred on the then uncovered pads. These residuals, if any, will be sealed into the pad after the upgrades are completed.

Historically, pad runoff has not always been directly analyzed for RCRA-regulated substances known to be present in pondcrete, saltcrete and other wastes present on the pads. This was reflective of the historical practice of using radiation screening techniques as the exclusive indicator of spill and cleanup characterization. Were RCRA substances present in runoff above levels of regulatory concern, in the absence of nuclides, it would not have been possible to determine that a "release" occurred and thus no RCRA contingency plan response would follow.

We agree that Attachment 3 (of the above referenced letter), with modifications to reflect completion of the pad upgrade projects, should be transmitted to the Colorado Department of Health for concurrence.

II. Compliance Activities

Several actions are currently underway to improve storage conditions on the pads and subsequent runoff management.

1. A new tent is expected to be erected no later than August 1, 1992, to provide shelter for pondcrete or saltcrete currently stored outdoors on the 750 Pad.
2. Tent berms for enhanced run-on control will be provided for all storage units on the 750/904 Pads by September 1, 1992.
3. The uncovered asphalt on the 750/904 Pads will be sealed to fix any residual contamination on the pads by June 15, 1992.

In addition to the physical upgrades described above, the following items describe current operational practices:

1. Pondcrete spill response is administered under procedures outlined in the RCRA Contingency Plan. Spill control will also be enhanced with the Spill Prevention Control Countermeasures and Best Management Practices Plan, currently planned for issue October 1, 1992.
2. Spill clean-ups on the sealed pads will continue to be verified by radiological decontamination criteria, as has been done in the past. Portable industrial hygiene vapor detection instrumentation generally does not have detection sensitivity levels low enough to verify spill clean-up under the current pad storage conditions. Also, as metals cannot be detected by vapor methods and are not readily soluble in water, it is difficult to obtain a residual sample short of scraping up the asphalt in the area of the spill, possibly damaging the integrity of the pads and sealant.
3. Pad runoff resulting from normal precipitation events is currently captured behind berms, collected, sampled, and transported to Building 374. Current policy for precipitation runoff sampling includes making our best attempts to obtain water samples of the 750/904 Pad Runoff after significant precipitation events. Samples are tested for:
 - a. Gross alpha
 - b. Gross beta
 - c. Nitrate, total
 - d. Cyanide
 - e. TDS
 - f. Ammonia
 - g. TCL - Volatiles (38 parameters)
 - h. TAL - Metals (24 parameters)
 - i. Mercury

Test results are summarized and reported to DOE for forwarding to CDH in the Monthly Update on Status of Pondcrete Operations.

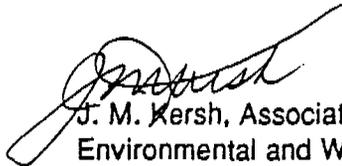
III. Conclusion

Based on the above regulatory interpretation and planned upgrades, we believe pad runoff resulting from normal precipitation events could be regulated as stormwaters after completion of all pad upgrades. Catastrophic weather events causing damage and possible releases of hazardous waste from the pad storage areas, however, could cause pad runoff to be a potential RCRA release. In that unlikely event, such a release will be managed under the RCRA Contingency Plan.

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We plan to continue managing the pads and pad runoff as described above unless other written direction is received from the DOE, Rocky Flats Office.

If you have any questions regarding the comments provided herein, please contact Allen Schubert of my staff at extension 5251.



J. M. Kersh, Associate General Manager
Environmental and Waste Management
EG&G Rocky Flats, Inc.

WMB:aaf

Orig. and 1 cc - R. M. Nelson, Jr.

cc:

J.	Dion	-	DOE, RFO
T.	Lukow	-	"
M. E.	Van Der Puy	-	"
J. D.	Wienand	-	"