

PREST CONTROL
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EG&G ROCKY FLATS

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

December 22 1992

92 RF 14865

Robert M Nelson Jr
Manager
DOE RFO

Attn S R Grace

RESPONSE TO DOE/RFO MEMORANDA REGARDING RADIOLOGICAL CONTAMINATION
CHARACTERIZATION AND POSTING RLB-0781 92

Refs J K Hartman ltr (13466) to R Benedetti Operable Unit 1 (881 Hillside) Plutonium
Contamination November 30 1992

J K Hartman ltr (13463) to R Benedetti Posting and Control of Contaminated Area
November 30 1992

This letter is in response to the two referenced memoranda They will be addressed in sequence as
Items 1 and 2 respectively

Item 1

The plutonium contamination identified near the extraction well at the 881 Hillside was posted on
December 1 1992 As requested Messrs Schassburger and Grace were promptly notified

In response to your request to characterize the contamination, we have developed a plan to be
conducted in two steps Step 1 will be to characterize the plutonium contamination near the
extraction well using Field Gamma Spectroscopy This characterization will identify the horizontal and
vertical extent in terms of activity concentrations (e g pCi/gram) EG&G Rocky Flats Inc (EG&G)
expects that this first step will be completed by January 13 1992

In the event that the plutonium contamination characterization Step 1 cannot be attributed to a
nonwaste related activity EG&G proposes to perform a walkover survey of the 881 Hillside Area to
assess whether other similar contamination sources exist (Step 2) Step 2 will be performed only if
the plutonium contamination cannot be attributed to a nonwaste related activity and only with
DOE/RFO concurrence Step 2 will be performed using a FIDLER with Field Gamma Spectroscopy
support Barring additional snowfall or poor snowmelt EG&G anticipates completion of Step 2 (if
necessary) by February 5 1992

An Action Plan detailing the methods and procedures for characterizing the plutonium near the
extraction well and for the walkover survey is provided as Attachment 1

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DONALD M M		
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REPLY TO RFP CC NO
03 + 6 004 RF 92

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 PARTIAL

APPROVALS
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SIGN & TYPIST INITIALS
MS/dmf

ADMIN RECORD

A-OU01-000497

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REVIEWED FOR CLASSIFICATION/UCNI
BY G. T. Outlook 82
DATE 3-31-93

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Item 2

The referenced memorandum correctly identifies that EG&G has not posted areas containing Americium concentrations exceeding 4 pCi/gram and Plutonium concentrations exceeding 25 pCi/gram. To our knowledge DOE/RFO is particularly concerned about the area around the 903 Pad that was identified by a Tiger Team audit as being of concern. EG&G has initiated the process of posting the 903 Pad however competing priorities faced by the Maintenance Department have delayed this action. The 903 Pad is marked and the hazards are identified. We currently expect that revised posting of the 903 Pad will be completed by February 1 1993. If we cannot post the 903 Pad area by this date we will appraise you.

At this time we wish to inform you of work we have initiated to establish risk based action thresholds for radionuclide contamination in soils. We feel that the product of this work will supplant the Americium and Plutonium soil guidelines provided by DOE/RFO in August 1992.

EG&G has taken the initiative to develop soil action guidelines based on requirements identified in DOE 5400.5 Radiation Protection of the Public and the Environment 1989 and DOE's Radiological Control Manual (DOE/EH 0256T 1992). The methodology uses DOE's Residual Radioactive Material Guidelines (RESRAD) computer code as directed by the aforementioned guidance documents. Preliminary results indicate that RESRAD soil action guidelines will be approximately 10 fold higher (i.e. closer to 40 pCi/gram and 240 pCi/gram for Americium and Plutonium respectively). In addition to application for posting and related worker safety issues soil action levels developed with RESRAD will also be applicable for revising release limits currently imposed on RFP.

Attachment 2 contains a draft of these preliminary findings. EG&G expects to be able to report to DOE/RFO in late February 1993 on the findings of this work. We will make appropriate recommendations with respect to posting establishing radiological control areas (RCAs) and related applications of this new work at that time.

If you have any questions regarding this letter and attachments please contact D. M. Smith of Environmental Science and Engineering at extension 8636.



R. L. Benedetti
Associate General Manager
Environmental Restoration Management

DMS dmf

Org and 1 cc R. M. Nelson Jr

Attachments
As Stated (2)