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Date: July 29, 1998  
Refer to: EM/ER:98-260

Dr. Robert S. Dinwiddie  
NMED-HRMB  
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**SUBJECT: RESPONSE TO APPROVAL UPON MODIFICATION FOR RFI REPORT AND RESPONSE TO RSI FOR PRS 0-030(g) (FORMER OU 1071, FU 1)**

Dear Dr. Dinwiddie:

Enclosed are the clean replacement pages as requested by your Bureau in the Approval Upon Modification for RCRA facility investigation (RFI) Report on PRS 0-030(g) (referenced by LAUR-95-3263) and Response to Supplemental Information (dated June 10, 1998 and referenced by EM/ER:98-191). The Approval Upon Modification was received on July 9, 1998.

If you have any questions, or require additional information, please contact Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,

*James M. Ray for*  
Julie A. Canepa, Program Manager  
LANL/ER Project

Sincerely,

*T. J. Taylor*  
Theodore J. Taylor, Program Manager  
DOE/LAAO

JC/TT/VR/dm

Enclosure: RFI Report for SWMU 0-30(g) replacement pages

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LANL WF 1/1071/0/0-30(g)

Dr. Robert S. Dinwiddie  
EM/ER:98-260

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July 29, 1998

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## **EXECUTIVE SUMMARY**

Phase I investigation at solid waste management unit (SWMU) 0-030(g) had the following main objectives: (1) to determine whether a septic tank existed at the site; (2) once the septic tank and associated drain lines were located, to establish whether the site had been contaminated and, if so, to determine the degree of contamination; and (3) to take a corrective action approach, according to which the tank was to be removed and the residual contamination cleaned up.

In the process of sample collection at SWMU 0-030(g), the approach taken was the one summarized in the Resource Conservation and Recovery Act (RCRA) Facility Investigation Work Plan for Operable Unit 1071. In addition to the two channel-sediment samples collected according to the work plan, several other samples were collected upstream and downstream from the junction of the outfall drainage and the drainage channel. The objective for taking these additional samples was to further characterize the contaminants present in the drainage channel.

After the septic tank had been located, it was excavated and removed. Extensive data collected during 1993 indicated that several radionuclides and inorganic chemicals were present at elevated concentrations in soil and/or sludge samples collected from within the septic tank and from the tank's immediate vicinity. The contaminated material was removed as part of the excavation of the septic tank and associated drain line.

The human health screening assessment conducted with data derived from the outfall sampling suggested that plutonium-239/240 and polychlorinated biphenyls (PCBs), which were found at concentrations slightly greater than their respective screening action levels (SALS) and in a very limited area should not result in adverse effects on human health. At the same time, the results of the multiple-constituent evaluation suggested that the presence of other chemicals in soil at concentrations below the SALs should not result in adverse effects on human health.

The ecotoxicological screening assessment identified 9 chemicals as contaminants of potential ecological concern (COPECS) because they are present in soil at one or more outfall sampling locations, at concentrations greater than their respective ecotoxicological SALs (ESALs). Although these chemicals have the potential to migrate down the outfall channel, they are not present at high enough concentrations to become a source of contamination to sensitive habitats in the canyons. In addition, removal of the septic tank, its contents, and surrounding soil eliminates any potential source of increased concentrations of COPECS at the outfall. Therefore, those chemicals identified at the outfall should not have any adverse ecological impact. On the basis of results from the human health and ecotoxicological screening assessments, SWMU 0-030(g) is proposed for no further action.

outfall may migrate farther into the canyons; however, they are not present at high enough concentrations to be considered a source of contamination to sensitive habitats in the canyons. Therefore, on the basis of potential ecological impact, SWMU 0-030(g) is recommended for NFA.

#### **4.5 Conclusions, Actions, and Recommendations**

The objective of the Phase I investigation at SWMU 0-030(g) was to locate, excavate, and remove the septic tank and determine the presence or absence of radiological and/or hazardous contaminants. Extensive data collected during 1993 indicated that several radionuclides and inorganic chemicals were present at elevated concentrations in soil and/or sludge samples collected from within the septic tank and from the tank's immediate vicinity. The contaminated material was removed as part of the excavation of the septic tank and associated drain line.

A human health screening assessment was conducted on data collected from the outfall. According to the results of this assessment, two chemicals were identified in soil - plutonium-239/240 and PCBs - at concentrations slightly greater than their respective SALS. However, further evaluation of the entire data set suggests that the presence of these chemicals at those particular concentrations and in a very limited area should not result in adverse effects on human health. At the same time, the results of the multiple-constituent evaluation suggest that the presence of other chemicals in soil at concentrations below the SALS should not result in adverse effects on human health.

An ecotoxicological screening assessment was conducted on data collected from the outfall. Nine chemicals were identified as COPECs because they are present in soil, at one or more outfall sampling locations, at concentrations greater than their respective ESALS. These chemicals have the potential to migrate down the outfall channel; however, they are not present at high enough concentrations to become a source of contamination to sensitive habitats in the canyons. In addition, removal of the septic tank, its contents, and surrounding soil eliminates any potential source of increased concentrations of COPECs at the outfall. Therefore, those chemicals identified at the outfall should not have any adverse ecological impact. On the basis of results from the human health and ecotoxicological screening assessments, SWMU 0-030(g) is proposed for NFA.