

UNIVERSITY OF CALIFORNIA
LOS ALAMOS SCIENTIFIC LABORATORY
(CONTRACT W-7405-ENG-36)
P. O. Box 1663
Los Alamos, New Mexico 87544

IN REPLY

REFER TO: H7-CWC-714

January 11, 1971

1246 TA-21
Christenson

Herschel W. Godbee
Process Design Section
Chemical Technology Division
Oak Ridge National Laboratory
P. O. Box X
Oak Ridge, Tennessee 37830

Dear Herschel:

Attached is a copy of a memorandum from Dean Meyer in response to your request of December 16, 1970.

In discussing this with Dean, he pointed out that any significant quantity (milligram) of plutonium has, since 1956, been placed separately in special pits or wells. We believe, although it can't be proven, that the average concentration of ^{239}Pu in the main pits is well below 10 nCi/gram. The other material is in wells or shafts encased in concrete and asphalt.

Should you need more information, do not hesitate to ask.

Sincerely yours,
Original Signed by
C. W. CHRISTENSON

C. W. Christenson
Group Leader, H-7
Industrial Wastes Group

CWC:gm

Enclosure: 1 copy memorandum from D. D. Meyer, H-1, to
C. W. Christenson, H-7, January 4, 1971

XC: D. Meyer, H-1



10037

C. W. Christenson, Group Leader, H-7

Jan. 4, 1971

Dean D. Meyer, Group Leader, H-1

VOLUME OF TRANSURANIUM WASTES BURIED AT LOS ALAMOS

H-1

In answer to Herschel Godbee's request for volume of trans-uranium wastes buried at Los Alamos, as you know, we cannot answer this question since all radioactive wastes have been buried in the same pits.

I have the following information on burial pits which might be used. There are four waste pit areas at Los Alamos.

Area A - These were the first pits used, to my knowledge, and the main radioactive material buried was Polonium. There may have been a trace of ^{239}Pu . These pits were closed at the time of my arrival, which was July, 1946. Estimated volume is 4,000 cubic yards. In 1969, a pit was dug adjacent to these old pits and it has been used to dispose of waste material removed from DP West during the rehabilitation work. I do not believe the amount of plutonium in this pit would justify digging up. The volume is 8,500 cubic yards; the pit is still open.

Area B - This is a series of pits on DP Road. The total volume of the pits, after deducting the three foot of cover material, is 28,000 cubic yards. These pits actually contain very little Plutonium. At the time they were in use, Pu was scarce and only that which was present as contamination was buried. I would estimate that the entire pit area contains no more than 100 grams of ^{239}Pu . Also, a portion of this area has been paved and is being used as a parking lot.

Area C - This area is adjacent to TA-50. It contains six pits with a volume, after allowing for dirt cover, of 118,000 cubic yards.

Area G - This is our present disposal site, located at Mesita del Buey (TA-54). This area contains five full pits, plus one which is approximately 3/4 full. The total volume, after allowing for cover, is 215,000 cubic yards as of January 1, 1971.

Summary -

Area A	12,500 cubic yards
Area B	28,000 cubic yards
Area C	118,000 cubic yards
<u>Area G</u>	<u>215,000 cubic yards</u>
Total	373,500 cubic yards

Since 1956, we have kept a record of the volume of the containers placed in the burial pits. The total volume of material placed in the pits since then is \approx 97,500 cubic yards. The volume of the pits used during this period, allowing for a 3-foot cover, is 24,600 cubic yards. The difference is the dirt that has been used to cover the layers of material.

Original Signed by
Dean D. Meyer

Dean D. Meyer

DDM/eh

cc: File 