

OFFICE MEMORANDUM

TO : E. E. Wingfield, Chief, Operations Br.
AEC-LAAO

DATE: October 30, 1973

AREA A

FROM : *George L. Voeiz*
George L. Voeiz, M.D., Health Division Leader

SUBJECT : WASTE STORAGE TANKS (General's tanks)

SYMBOL : H

*Bill Gibson
CMB II
inspired when
filled during 1970*

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7A21

Although there are a great number of tanks (about 50) containing radioactive wastes at LASL, we do not consider them as storage tanks but rather as process tanks since these are kept under nearly constant surveillance and are used as holding tanks rather than storage. The same is true of toxic, non-radioactive solutions.

The only storage tanks are the so-called "General's Tanks" located between DP East and DP West. These are two 50,000 gallon tanks buried about 8 ft below grade with an 8 in. slab of concrete above the tanks. These tanks were built in 1945 and the last data we have are in August 1947. The tanks have been abandoned and ignored until recently.

The amount of radioactivity (an equivalent of about 230 grams of ^{239}Pu (about one-third of which is ^{241}Am) is trivial compared to the amount of radioactivity in the Hanford tanks. Furthermore, only about 0.7% of the radioactivity is in solution so that any leakage would have probably stayed very close to the tanks.

Although the surveillance of these tanks has been, to say the least, minimal in the past, there has been no leakage determinable by our present information. The volume of 40,000 gallons in one tank and 9,000 in the other as well as chemical concentrations is comparable to the record data.

It is planned to transfer this solution to Bldg. 257 for treatment. This will take some time because we will have to rely on dilution to handle the anions which are quite high, e.g., NO_3^- at 130,000 ppm for which the MPC is 45 ppm. An anion exchange column added to Bldg. 257 would eliminate this problem.

In any event, when the tanks are emptied, it would seem advisable to leave them there. They are already in a contaminated dump area and I can't conceive of a better method of burial.

GLV/CWC/mjt

CC: Eldon Christensen, CMB-11
C. W. Christenson, H-7



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