

OFFICE MEMORANDUM

REC'D ENG-DO

OCT 1 1971

TO : H. Jack Blackwell, Area Manager, LAAO

DATE: September 30, 1971

FROM : H. M. Agnew, Director

SUBJECT: HISTORY OF DISPOSAL OF CONTAMINATED REAL PROPERTY

SYMBOL : DIR

The following is a report on the evaluation of contaminated real property which has been released from AEC control. In your memo of August 11, 1971, entitled Management of Contaminated Real Property, you stated Mr. Erlewine had requested certain information for historical purposes. This memo addresses itself to that request.

The remarks herein represent a summary of an investigation by the LASL Health Division concerning all areas of Los Alamos which at one time or another were involved with radioactive material, and which were subsequently released to the public. These areas are identified on several drawings, copies of which are attached.

TA-1 was the original technical area where radioactive materials were processed and essentially all radiation producing machines such as the Van de Graaff and cyclotron were located. This area was vacated over a period of years spanning the late 1950's and early 1960's as new facilities south of Los Alamos canyon became available. Each building and its adjacent land were surveyed as they were vacated. If at all contaminated, the building material was removed and placed in contaminated waste burial pits. (See my memo to you dated August 25, 1971, titled "Planned Disposal of Contaminated Real Property"). After the buildings were removed, the surface of land was checked and if contaminated, was removed and back-filled with clean dirt. In this area there was a maze of sanitary sewers, contaminated sewers, water lines, and gas lines. The location of the contaminated sewer was known, and starting at each building, the line was dug up, soil surrounding the pipe monitored, and if found contaminated, was removed. With the exception of one section of abandoned pipe, which was later removed along with the acid sewers in the townsite, the entire contaminated line was removed up to Central Avenue. The sanitary sewer was traced and sections removed at each manhole. These sections were monitored and as none were found contaminated, the lines were left in place. All water and gas lines were left underground. A general statement of the condition of this area is given in a memo from Dr. T. L. Shipman to R. E. Dunning, January, 1960 (Xerox copy attached).

0786 TA-1

Weldon	
1 Stephens	OK
2 Turner	OK
3 [unclear]	OK
Action	
2 Comment	
3 Information	
File	



3153

TO: H. Jack Blackwell

-2

DATE: September 30, 1971

TA-10 was a technical area which has two types of operations: a chemical separations unit and a firing site. The chemical unit building was removed; the small solid waste disposal pit and a sump for liquid wastes were excavated. These were dug out to a depth of approximately 15 feet at which level the radiation reading was still above background so the holes were filled and the surface area left at background radiation levels. The firing site contributed to surface contamination of the canyon area. All contaminated objects on the surface were picked up and an intensive search was made for material throughout the canyon area. The condition of this area on return to public use is given in a letter from N. E. Bradbury to C. C. Campbell, July, 1963 (Xerox copy attached) and a report, LAMS-2945 entitled, "TA-10, Bayo Canyon Cleanup, May 1963". Subsequent to this effort, inspections of this area have been conducted annually since 1963 with no evidence of radioactive contamination being found.

TA-45 was the decontamination plant for contaminated liquid wastes from TA-1 and TA-3. The structures and associated underground pipes were removed and buried. The outflow from the plant had contaminated the cliff face above the canyon floor. This contamination was removed by chipping off the cliff face with jackhammers; the rock removed was hauled to the solid waste disposal area. The stream bed in the canyon was left with spots of detectable contamination = 1000 dis/min - 60 cm<sup>2</sup>. The stream bed which is fed by sewage effluent from the Pueblo Canyon and Bayo Canyon Sewage Treatment Plants, and the land bordering this channel are retained as an easement by the AEC in order to permit monitoring of the channel. This easement has been recorded in the Los Alamos County records.

The acid sewers in the townsite had been used to transport liquid wastes from TA-1 and TA-3, and were removed except for certain sections under streets. These sections were capped and plugged at each end with concrete. The areas removed are shown on LASL Drawing ENG-R-1916, attached. On this drawing, it is noted that a section from the manhole ULR-61 to the intersection of Trinity Drive and Diamond Drive was not removed. This section serviced laboratories in HRL-1. The level of radioactivity discharged into this line was very low. When the TA-45 plant was de-commissioned, HRL-1 was connected to the County sanitary system. When an addition was built onto the Los Alamos Medical Center, this line was traced and found to be 20 feet under the surface. Since it was not highly contaminated, and the construction work on the addition did not extend down to the sewer, it was decided to leave the sewer in place. This decision is covered in a memo from E. A. Bemis to C. G. Notrott dated August 27, 1969.

The Trailer Parking Area, DP Road, is a portion of a solid waste disposal burial pit. The material in the pits had been covered with at

to: H. Jack Blackwell

3

DATE: September 30, 1971

least two feet of clean dirt. The area was leveled, compacted and then surfaced with asphalt. This area has not actually been released from AEC control except on a limited basis. Under contract AT (29-1)-1884, between the AEC and Los Alamos County, this paved, fenced area was leased to the County for a period of 10 years beginning September 1966. This lease can be terminated by either party at any time and is revokable by the Commission upon six month's notice. See memo from T. L. Shipman to S. E. Russo, "Utilization of Contaminated Dump for Trailer Parking," dated January 6, 1966 (Xerox copy attached).

Official AEC levels of contamination that are acceptable for areas returned to public use had not been formulated in the days when the land areas at Los Alamos were released. Each land area returned was surveyed using the best instrumentation available at that time. As shown, if areas having detectable surface contamination were found, the contamination was removed before the area in question was released or it remained under AEC control. A general criteria for release of land to the public was and is - would members of the Health Division be willing to use the land as a homesite?



H. M. Agnew  
Director

cc: H. C. Donnelly  
Dr. G. L. Voelz  
L. P. Reinig