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memorandum

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EARLY S-SITE HISTORY, LEE HILTON INTERVIEW

This memorandum outlines a discussion with Mr. Hilton on March 30, 1994 that occurred in the TA-35-268 conference room. The interview lasted from 1:00 p.m. to 3:30 p.m. OU 1082 Team Members Brad Martin, Don Hickmott, Margo Buksa, Karen Schultz Paige, Steve Watanabe and ElRoy Miller attended.

Mr. Hilton arrived in Los Alamos in 1944 and worked in Laboratory groups X-3, GMX-3 and WX-3 until 1979. He was in charge of a casting line during W.W.II and later worked in photography and S-Site plant operations. Prior to his arrival in Los Alamos, Mr. Hilton worked at Atlas Powder Co. doing explosives work and enlisted in the Army Air Corps.

Mr. Hilton provided the following pertinent information regarding buildings at S-Site:

TA-16-15: There was a fairly large amount of HE brought into the laundry as fragments on worker's clothing.

TA-16-18: There was a great deal of HE in the drain line for this steam washing building when it was dug up in the mid 1960s.

TA-16-19: Pump house for fuel oil tank TA-16-29 to pump fuel oil into TA-16-7 steam plant. Not contaminated with HE.

TA-16-20: Hilton confirmed that this was a water pump pit, linked to the sanitary water system at S-Site. It is not an HE sump. They were careful not to contaminate the administration are with HE. The pump pit only carried chlorinated, treated water.

TA-16-21: Chlorination station was not HE contaminated. Chlorination, water softening and water flow monitoring occurred here. No known chlorine spills.

TA-16-29: This fuel oil tank was connected to pump house TA-16-19 and was used to provide fuel for TA-16-7 boilers.

TA-16-49: Hilton believed that this building had a rest room in its northern side.

TA-16-58-61: These magazines stored raw HE product upon arrival in S-Site. both packaged HE and finished HE products were stored in TA-16-57-59. No open packages or loose HE was stored in these magazines. Packages of HE were taken from these magazines to buildings S-23 and S-24 (TA-16-25 and TA-16-26) for opening and inspection. Barium nitrate was also stored in TA-16-58-61.

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TA-16-63: This building was used for metals and is not contaminated with HE.

TA-16-62,64,65: These buildings were used with the receiving and handling of HE freighted from the outside and would be contaminated with HE, particularly TA-16-64. They were only used for one to one and one-half years as magazines. After that, carpenters and plumbers used the buildings for storage for a short time.

TA-16-106-109: These storage buildings were minimally used for packaged HE storage (similar to storage at TA-16-58-61), possibly for one to one and one half years when they were first built. They were used for storage of other materials such as aluminum powder, lead oxide, barium nitrate and other inert materials.

TA-16-139-146,190: These are a cluster of buildings located along Anchor Ranch Road near the old fire station. This are was not HE contaminated.

TA-16-200: Present day administration building never had a machine shop in it. Basement is not contaminated with HE, chemicals or oil. This building had a fuel tank on the west wall about 100' south of the northwest corner which was used for a backup generator in the building. The tank was removed after one to two years when the building was fitted with natural gas lines. No leaks from the tank were reported.

TA-16-202: The machine shop in the building did not machine any HE contaminated equipment. Water soluble soap and oils as well as minimal amounts of TCE and penetrating oil would have gone down the floor drains. No butyl acetate was used. The south end of the building was the WX-11 instrument shop. The north end was maintenance for compressors, hydraulics, etc. The East side was Zia electric. The oil overflow outfall daylighted near fence by the old guard shack (TA-16-209).

TA-16-260: Bays 1-8 were initially used for plastics explosives, not machining. Bay 25 was not originally designed and built on the building. However, it was added on almost immediately after TA-16-260 was built. The small hallway drain in Bay 25 was used to receive floor sweepings from the hallway, not the machining bay area. Hilton stated that a large horizontal milling machine ??? was used in that bay.

TA-16-308: This building was used to dry nitrocellulose explosives. However, the basement would not have become contaminated during this process.

TA-16-370: Floor drains from the building would be contaminated with barium nitrate from early days as a grinding facility. Barium nitrate was washed directly down the drains.

TA-16-391: Propane tank at Burning Grounds was used to dry materials in filter beds and tank before flash burning.

TA-16-396: Hilton believes that the rest rooms were inside TA-16-389 and that there was no latrine at the Burning Grounds.

TA-16-401 & 406: Pre-1986, before sand filters were routed to the pond or treatment facility, drain water was allowed to just run over the road into the canyon.

TA-16-411: This building was never used as a rest house, because it has no enclosed walkway connecting it to other buildings. It has always been used for storage and assembly of finished components. The temperature and humidity control equipment was used to control the environment for the assembly process.

TA-16-462: No known chemical spills.

TA-16-463: Should be considered contaminated with a wide variety of HE.

TA-16-478: The drain from the utility room would not be considered HE contaminated because it was located just outside the control room where they were careful not to get contaminated with HE. The utility room only had the pumps and condensers, with condensate leaking into the drain. There is a water cooled vacuum pump in the utility room which provided the vacuum needed to hold HE pieces in the chuck of the lathe located in the machining room. Although the vacuum lines are currently labeled "Danger - contaminated with HE", Hilton felt that it was unlikely that the vacuum lines were contaminated with HE because there is a filter on the front of the vacuum lines that prevents HE from going into the lines. Even if there were HE in the vacuum lines, he felt that it was unlikely that HE would then move into the water lines that drip into the utility drain outfall. Hilton felt that the building sump was a new feature added around 1965 and the sump drained to the east. Before the sump was added, the effluent drained through a French drain to the south which was not removed when the sump was added.

TA-16-481 & 488: Should be considered contaminated with HE.

General information about S-Site:

The rest houses were scattered throughout S-Site were well cleaned by Zia. The floors of the isolated utility rooms in the rest houses were wet mopped and washed down. The floor washings drained through the floor drains, carrying any traces of oil from the pumps and condensers.

The radiography are would not have HE contaminated floor drains since the work done there did not disturb the HE cast parts. The sources used in the buildings were radium and cobalt.

Hilton claimed that spills in magazines were uncommon. Standard clean up method was with a dustpan.

Removal of sumps throughout S-Site involved hand digging followed by an HE check using a test kit on all four sides of the sump.

E. T. Hilton

Cy: OU 1082 Archives
L. Hilton