

8/9/78

To: Merlin Wheeler , 14-12

From: John Enders

Subject: Some observations concerning the soil samples taken
in Area C by Linda Trojcki

On 8/8/78, I was shown a map of Area C that indicated "high" activity in two locations in Area C. These locations are in close agreement with areas that have had , in the past, certain operations, etc., which possibly could explain why these samples were "higher" in activity than others taken in Area C.

The "high" areas in question are near disposal shafts #17-20 and at the east end of pit #1. Although I use the term "high", it should be pointed out that at the time the following activities were carried out, the survey instrumentation in use at that time could not have detected the reported activity in Trojcki's samples.

(A)---at the East end of pit #1:

The H-1 Decontamination Crew had an asphalt pad placed near this location and used the pad for decontamination of equipment. Acids, VERSENE, and large amounts of water and steam ^{was} used in the decontamination process. The liquids would have flowed off in the general area where the "high" samples were reported.

Documentation of the above activity is now being researched by Jim Cox, H-1. He may have reports of this work which would indicate the contamination levels of the equipment as well as the degree to which the equipment was decontaminated, etc. This work took place during the late 1950's.

(B)---adjacent to shafts #20-17

There have been at least three operations that took place near this location which might account for the "high" activity reported for this location, they are as follows:

1. On, or about 1951, an attempted recovery operation was carried out in pit #1, Area C. The operation involved a search of waste packages which could have produced airborne contamination and subsequent surface contamination near the edge of pit #1, in the general area of disposal shafts #20-17.



2. A fire occurred in pit #3 (the pit just north of pit #1, on 3/24/59. Charles Blackwell and Jim Oakes of H-1, responded to this fire and reported several containers partially filled with parafin were burning. Attempts to put out the fire with water only caused the fire to spread and the use of copious amounts of "foam" finally put out the fire. As the waste packages involved in the fire came from all over the Laboratory, the radioactive contaminants would have included transuranics, uranium and mixed fission products. This fire is referenced in M.A. Rogers' report
3. A retrieval operation was carried out in shaft #17 on or about the first of February, 1961. The dirt overburden in the shaft was sucked out with a vacuum cleaner that did not have an exhaust filter on it. Other personnel who would recall this operation are: Jim Cox, H-1 and Don Peterson, Alt. H Div. Leader.
4. About 6 years ago, a retrieval operation was carried out in pit #4--about the middle of the pit. The operation involved removal of about 3 feet of "final cover" and excavation down into the pit of about two feet where a container of waste, generated at TA-45, was retrieved.
5. After the removal operations were completed on TA-45 there remained several truckloads of "clean" rubble and dirt. As pit #4's "final cover" had sunken, it was decided to place the TA-45 "clean" dirt and rubble on top of pit #4. The delivered loads were leveled with a grader. Although this dirt was "clean" by the then available means of detection, it could have had trace amounts of contamination that would be detected by currently used instruments.