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THE MEMPHIS DEPOT
TENNESSEE

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 105

DEPARTMENT OF HEALTH & HUMAN SERVICES 105 1

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Public Health Service
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Agency for Toxic Substances
and Disease Registry
Atlanta GA 30333

APR 13 1995

RECEIVED
APR 26 1995

Mr. Frank Novitzki
DDMT Project Manager
Defense Distribution Depot Memphis
2163 Airways Boulevard
Memphis, Tennessee 38114-5210

Dear Mr. Novitzki:

The following are ATSDR comments on the DDMT Screening Sites Field Sampling Plan, Draft Final, dated March 1995. Our major concern is the analysis of surface water and sediment from the various drainage ditches. The sampling plan should include adequate numbers and locations of samples to evaluate the potential for past and present exposures through these pathways. The sampling will be important in providing data with which ATSDR can address community questions about health impacts. Additionally, we have made recommendations about soil sampling in other areas of DDMT that might have an impact on public health. Incorporation of these modifications into the sampling plan will add to the ability to accurately evaluate the potential for public health impacts at DDMT. We feel that the modifications recommended are necessary to enable ATSDR to perform the evaluation of public health issues at DDMT.

Reference Section 4.0.2 Sampling Depth Rationale -

- The optimum soil and sediment sample depth for evaluating the potential for human exposure should be 0 -3 inches, with 0 - 6 inches as an acceptable alternative. Compositing of longer (deeper) intervals will not best represent soil that people would be most likely to contact. For this reason, we would like to request that, at least for soil and sediment sampling at or outside DDMT fences, samples be taken at 0 - 3 inches, relative to ground surface.

Reference Section 4.1.8 Site 64 Bauxite Storage, Southwestern Quadrant of Dunn Field -

- Figure 4-7, depicts one sediment sample location. There are two drainages in this portion of Dunn Field. It is unclear from which of these drainages this sample will be collected. Both drainages need to be sampled.

Several questions have been raised by residents of Rozelle Street regarding these drainage ditches. It is ATSDR's recommendation that, at least initially, a limited number (6 - 8) of surface soil screening samples be collected from the areas immediately surrounding both drainages, inside the DDMT fence. These samples will provide information on whether contamination may be in surface soils subject to runoff into the drainages. Additionally, we recommend that a limited number of screening samples (6 - 8) be collected offsite from the two ditches and "floodplains". It is likely that water ponded in the floodplain areas following rainfall, allowing any entrained or dissolved contaminants to settle out. Also, these low-lying areas adjacent to the drainage ditches are the most likely locations for contact by people of any contaminants which might have left Dunn Field via surface water.

The collection and analysis of samples from these areas would answer numerous questions raised by neighbors of DDMT, and would serve to allay concerns about the possible harm from contamination at Dunn Field.

- As a side note to this issue, excerpts of interviews (provided by Sue Estes, ME3) with Cora Johnson, of 1835 Rozelle Street, and Ms. Annette Garner, also from that neighborhood, mention soil and water samples collected by DDMT from the drainage ditches on Rozelle Street. What is the status of these samples? This information would be extremely useful in the evaluation of offsite drainage ditch contamination.

Reference Section 4.2 OU-2 Screening Sites -

We agree with the decision to collect surface soil samples in the vicinity of the sandblasting operation. We also stress the importance of determining whether material from the sandblasting operation could have reached DDMT boundaries and beyond. We understand that source areas are usually sampled from the source outward to establish the extent of contamination. However, in this instance, we need to evaluate the potential of past pathways (air and soil) which may have exposed the adjacent neighborhood to contamination from the sandblasting operations. Sampling data on past exposures is not available. Additional data collected from the fence would serve as an aid to evaluate the potential for airborne transport of contaminants. To best address the potential for exposure, the sampling and analysis proposed will be needed to help eliminate this pathway as a concern if low levels of contamination or no contamination are found. For this reason, we recommend 6 to eight samples be collected at the fenceline to the west and south of the sandblasting operation buildings.

Reference Section 4.3.2 Site 52 Golf Course Pond Outlet Ditch-

According to the draft sampling plan, sediment and surface water samples are to be collected from this ditch at the fenceline. ATSDR recommends that 3 - 4 screening samples be collected from beyond the fenceline. Analysis of these samples would again answer concerns raised by the community regarding the possibility of public health affects of contamination which might come from DDMT. Also, for ditches that were at one time unlined and are now concrete-lined, ATSDR recommends consideration be given to sampling soil from the edges of these ditches. Samples collected from under the concrete will provide useful information. However, it is possible that during construction of the concrete aqueducts, bottom sediment was removed, leaving relatively unaffected sub-layers directly underlying these aqueducts.

Reference Section 4.4.9 Site 56 - Main Installation, West Storm Water Drainage Canal -

- Another area that requires a small number (3 -4) of screening samples (surface soil/sediment) would be the exit point of the ditch which drains to the west from the Open Storage Area (Perry Rd/Sparks Rd area). This drainage canal is now concrete lined, but in the past was not. It is suggested that samples be collected of soil from the edges of this canal, outside the DDMT fence. During review of the Sampling Plan, I was unable to locate any mention of sampling in this area. Also, as with Section 4.3.2. above, for ditches that were at one time unlined and are now concrete-lined, ATSDR recommends consideration be given to sampling soil from the edges of these ditches.

If you have questions regarding these comments, please contact me at (404)639-6070, or fax me at (404)639-6076.

Sincerely,

Jeff Kellam
Environmental Health Scientist
Federal Facilities Assessment Branch

cc:
Martha Berry, EPA R-4
Jordan English, TNDER
Christine Kartman, DDMT
Robert Safay, Reg IV
PERISB

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