

DEC 08 1989

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Mr. Barry R. York  
Apparatus Service Department  
General Electric Company  
1 River Rd., Bldg. 6, 2nd Floor  
Schenectady, NY 12345

RE: Document Review  
Task II - RFI Workplan

Dear Mr. York:

The Environmental Protection Agency (EPA) has completed its review of the above-referenced document. All necessary elements are present in the Remedial Facility Investigation (RFI) workplan, but the same problems that have surfaced in other submittals are present in the RFI workplan. The schedule also appears to be somewhat protracted. These problems can be easily resolved with additional detail and some revision and/or discussion regarding the schedule.

A major point that has been reiterated throughout the General Electric submittals is that polychlorinated biphenyl (PCB) contamination appears to be restricted to areas of soil-staining. While this may be true, it is not apparent that soil sampling has been done outside areas of stained soil to verify this premise. The thrust of this workplan must be a comprehensive site characterization that defines contamination on an over-all basis and fills in data gaps. Please clarify whether over-all characterization has been done, or define the approach General Electric intends to take towards characterization.

Also, elevated concentrations of acetone and 2-butanone are consistently described as residual from cleaning operations and methylene chloride as lab contamination. Data in other reports indicate concentrations of acetone and 2-butanone well above those expected as residual from cleaning. The same is true for methylene chloride and lab contamination. Detection limits for these compounds are also elevated. Based on data included in the General Electric submittals, it has not been verified one way or another whether these are in fact QA/QC problems, or whether the compounds represent soil contamination. Unless grease and/or oils are a problem in the soils, the problem with acetone can be easily resolved by not using it in the cleaning process.

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The proposed boring depths (B-2, B-3, B-4, and B-5) are 30 feet unless "obvious contamination" is encountered. It is further stated that a field Gas Chromatography (GC) will be used to aid in determining the termination of Phase I borings. Obvious contamination is not defined, but visual observation will not be adequate. It would be more efficient to run a field GC at the proposed termination of the boring along with confirmatory lab analysis. This will mitigate the need for multiple mobilizations.

The number of samples proposed for chemical analysis from the five borings is probably adequate (at least 24). The basis for sample selection, however is not clear. Again, visual observation is not a reliable indication of the presence or absence of contamination. Please define the basis for sample selection for these borings. Analyses must adequately characterize the vertical limits of contamination.

With respect to excavation in the areas of stained soil, a more specific approach must be developed as opposed to collecting grab samples. It appears that the stained areas of contamination and verification of clean areas have not been defined.

Installation of piezometers and monitoring wells is appropriate. However, at this facility monitoring of the vadose zone is also pertinent. A brief description of the vadose zone investigation from the closure plan should be included in this report. Decisions regarding the exact placement of monitoring devices, be they for ground water or the vadose zone, will be made when the hydraulic regime is established, after evaluation of piezometer data.

The schedule for completing the actual work is also of concern. The most efficient approach is to install piezometers as an initial step. These can be stabilizing while soil borings are completed. Piezometer installation should take no more than five days, including stabilization. Installation of piezometers, ground water monitoring well installation, and ground water sampling can easily be completed within a 30-day period, or 5 work weeks.

With respect to cleansing of sampling equipment, the methods described meet EPA protocol. A suggestion however, is that unless grease and/or oil appears to be problem, a hexane and or alcohol rinse may not be necessary.

In regard to ground water sampling, samples shall be collected as soon as the well has sufficiently recovered from purging. The first sample should be tested for pH, temperature, and specific conductance. Additional samples should be collected in the order of volatilization sensitivity. If recovery exceeds two hours, the sample should be extracted as soon as sufficient volume is available with volatiles collected as soon as possible. At no time shall the wells be overpumped during development so that cascading down the screen is caused.

Please correct the diagrams of proposed well construction. Double casing of ground water monitoring wells is described in the text of the RFI workplan, but the diagram in Figure C-2 does not depict double casing.

The most significant concern that EPA has with respect to the RFI workplan is the approach to sampling. A more scientifically rigorous definition of sample grids is required rather than the somewhat loose approach presented. I would prefer to meet with you or your representative and clear this up quickly rather than General Electric trying to guess what EPA needs. The other comments are easily addressed by General Electric, allowing us to approve the work plan no later than Christmas. I would like to arrange a meeting in Albuquerque early in the week of December 11, 1989. This should give you and your staff time to review and probably incorporate most comments. Any remaining issues can be discussed at this meeting and we can proceed.

Please feel free to call me at (214) 655-6480 if you have any questions or concerns.

Sincerely,

Kathleen O'Reilly, Geologist  
Technical Section (6M-CX)  
RCRA Enforcement Branch

cc: Mr. Jens W. Deichmann  
American Financial Center