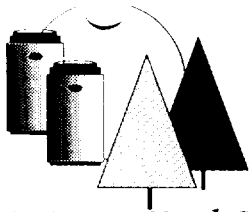


72-22



Private Fuel Storage, L.L.C.

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John L. Donnell, P.E., Project Director

Mr. Mark Delligatti
Senior Project Manager
Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

April 14, 1999

COMMITMENT RESOLUTION LETTER #4
DOCKET NO. 72-22 / TAC NO. L22462
PRIVATE FUEL STORAGE FACILITY
PRIVATE FUEL STORAGE L.L.C.

- Reference: 1. PFS Letter, Parkyn to Director, Office of Material Safety and Safeguards, Responses to Request for Additional Information, dated February 10, 1999
- 2. PFS Letter, Donnell to Delligatti, Submittal of Commitment Resolution Information, dated March 24, 1999
- 3. PFS Letter, Donnell to Delligatti, Submittal of Commitment Resolution Information, dated March 31, 1999

In accordance with our April 8, 1999 telephone call, Private Fuel Storage submits the following resolution to NRC/CNWRA comments regarding recent PFS Safety RAI responses (Reference 1) and additional comment resolution responses (Reference 2 and 3).

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RAI's 2-5 and 2-7 (first round), Seismic Program

NRC Comment – The PFS field geotechnical investigation program is limited in the number of borings and tests provided and relies heavily on the Standard Penetration Test blow counts (N-values) to extrapolate results of laboratory tests to deeper soils within the profile. PFS should further justify that the subsurface conditions at the site are uniform. PFS should explain how the N-values were used in developing the SAR. In addition, PFS should provide profiles of shear strength and compressibility of the soils within the depth interval of 10 ft to ~25 ft. PFS should consider performing additional field tests to determine in situ shear strengths, such as field vane tests or cone penetrometer tests, to determine the extent and thickness of the lower blow count soils on site.

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C PDR

PFS Response – PFS will provide a report identifying how the N-values were used in developing the SAR. PFS will perform additional field work to develop profiles of strength and compressibility of the soils within the depth interval of 10 ft to ~25 ft. This program will include performing cone penetrometer tests (CPT) to develop continuous profiles of the strength of the soils in the upper layer (from the surface down to ~ 25 ft) within the pad emplacement area. Dilatometer tests will be performed using cone penetrometer technology to develop profiles of the compressibility of these in situ soils.

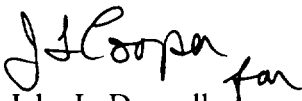
Phase 1 of this program will include performing 36 CPTs, located on a grid pattern of ~300 ft within the entire emplacement area. This pattern will provide nine CPTs in each of the four quadrants occupied by the cask storage pads shown in the attached Figure 1. Several of these CPTs will be located in close proximity to the locations of the borings that were drilled in the emplacement area to permit using the existing boring information in interpretation of the CPT data. The results of the Phase 1 CPTs will include continuous profiles of sleeve stress and tip resistance, which will be used to identify the extent and thickness of the lower blow count soils within the upper layer. These data will also be interpreted to provide profiles of soil stratigraphy, blow count, and strength.

In Phase 2, the cone penetrometer technology will be used to perform dilatometer tests (DMT) to develop profiles of the compressibility of the in situ soils at the locations identified in Phase 1 where the softer soils exist. These data are expected to provide sufficient information on the strength and compressibility of the in situ soils over the entire emplacement area.

PFS will provide a report identifying how the N-values were used in developing the SAR by April 23, 1999. It is anticipated that all of the field activities can be performed during the first two weeks of May and that PFS will be able to report to the NRC the results of this field program by May 31, 1999.

If you have any questions regarding this response, please contact me at 303-741-7009.

Sincerely,


John L. Donnell
Project Director
Private Fuel Storage L.L.C.

Enclosure

Mr. Mark Delligatti

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April 14, 1999

cc:

John Parkyn-1/1

Jay Silberg-1/1

Sherwin Turk-1/1

Asadul Chowdhury-1/1

Murray Wade-1/1

Scott Northard-1/1

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Richard E. Condit-1/1

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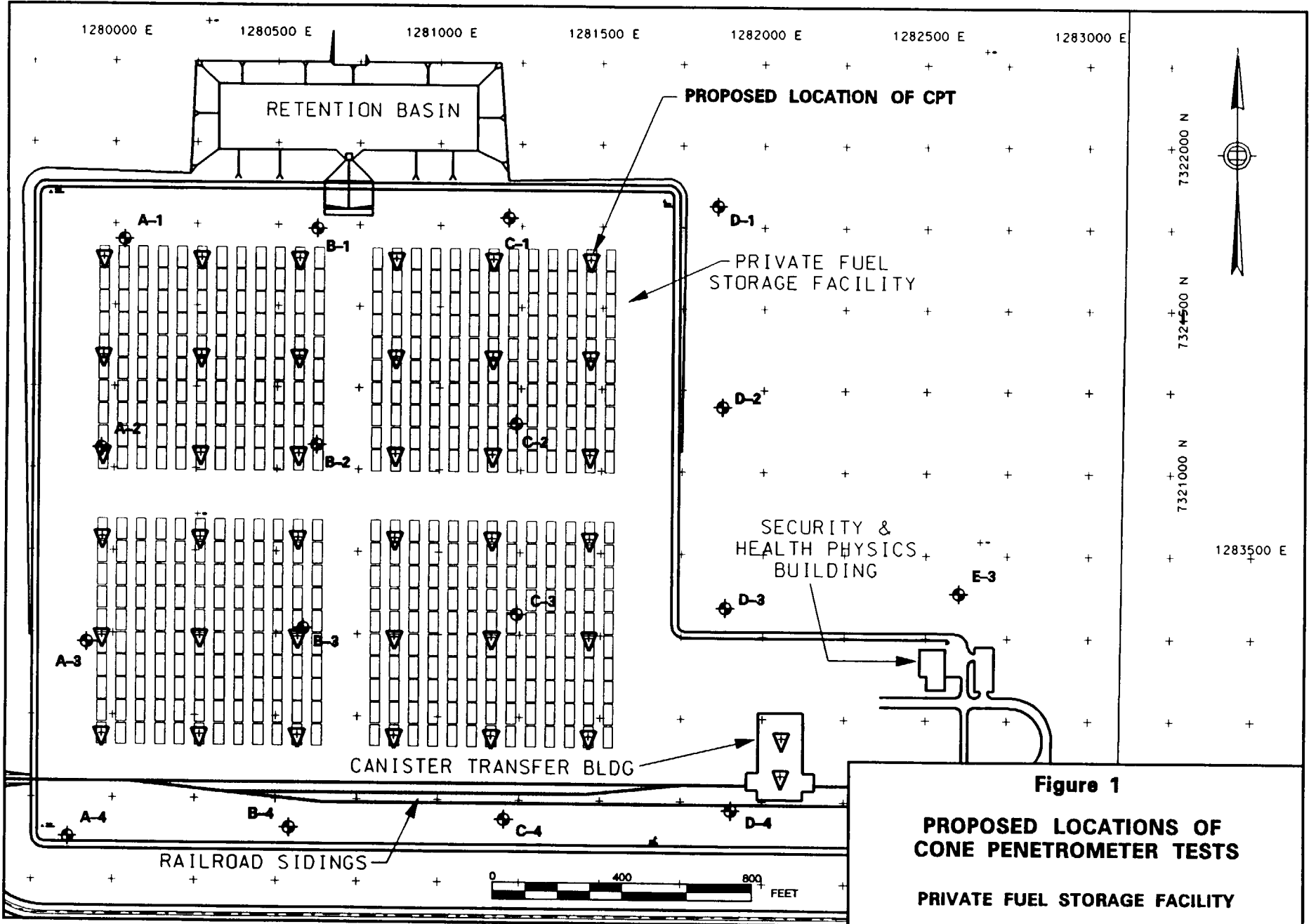


Figure 1
PROPOSED LOCATIONS OF
CONE PENETROMETER TESTS
PRIVATE FUEL STORAGE FACILITY