MEMORANDUM FOR Record

SUBJECT: DORF Underground Waste Storage Tanks

1. The Oak Ridge National Laboratory will be taking underground tank sediment and soil samples from 23-25 February 1999 near building 516, Forest Glen Section for alpha, beta or gamma radiological contamination.

2. The underground flow through/hold-up tanks are scheduled to be removed and a single flow through line will be connected to the sanitary sewer drains from buildings 513 and 516, Forest Glen Section.

3. If the radiological contamination survey for alpha, beta, and gamma contamination results from Oak Ridge National Laboratory are found to be releasable, the tanks will be removed by a contractor. If the results are positive, the tanks will be decontaminated prior to removal from the site. The Army Reactor Office will have to be included in the contamination results and decontamination plan as these tanks are also elements of the Army Reactor Office permit for the DORF facility.

4. The two tanks furthest from building 516 have been sealed since the DORF reactor was decommissioned in the 1970's. The closest tank has been used as a flow through tank since the DORF decommissioning. No radioactive waste from building 516 has been discharged through this tank since 2 March 1998. The primary radionuclides discharged through this tank were H-3 (12.3 y), S-35 (87.4 d), P-32 (14.3 d) and Cr-51 (27.7 d). Of these, tritium is expected to be the primary radionuclide remaining in this tank since the other shorter lived radionuclides should have mostly decayed away.

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