

MEMORANDUM FOR RECORD

SUBJECT: Final Action Report for Decontamination and Decommissioning, St. Albans Veterans Administration Extend Care Facility, Queens New York (Jan 2003).

1. The U.S. Army Corps of Engineers (USACE) completed activities associated with the residual radioactive material located at the St. Albans facilities. Upon completion of activities the USACE published The Final Remedial Action Report for Decontamination and Decommissioning. The Nuclear Regulatory Commission (NRC) reviewed and concurred with the report and is preparing to publish their National Environmental Policy Act documentation to remove the license from the facility. As a part of this process the NRC forwarded information on the St. Albans facility and the Final Remedial Action Report generated by USACE to the Environmental Protection Agency (EPA) for review.
2. The EPA reviewed the report and identified, to the NRC, two issues requiring clarification. The NRC contacted USACE and a conference call was initiated to address the EPA issues. The participants in the call were as follows; NRC Region I – Mr. John Wray, EPA Region II – Ms. Jeanette Eng, and USACE - Mr. David Brouwer and Mr. Hans Honerlah. The issues and resolution to the issues are discussed below.
 - a. Section 4.2 – page 4-2 states – “The water was collected, sampled, and analyzed for strontium 90, carbon 14, and tritium. Analytical results of the samples indicated that the water collected did not contain contaminants of concern above the DCGL and was evaporated on site at the direction of USACE.

The issue identified by the EPA is that the St Albans decommissioning plans did not establish DCGL’s for liquids. USACE agrees with the EPA and identifies the error in the report. Below is additional information concerning the issue.

During remediation activities, a capped pipe in Survey Unit 1A “ High Level and Low Level Labs and Isotope Storage Area” was breached during removal activities. Water was not expected to be present, however liquids remained within the pipe from past operations. Water contained in the pipe was collected in 55-gallon containers. It was determined that the best way to address the liquid was to evaporate the water resulting in only dry residue remaining within the drums.

CABRERA provided a procedure entitled “Water Evaporation From Containers Within Radiological Controlled Areas”, Revision 0, October 13, 2000. This procedure was written to assure that the evaporation of water potentially containing radioactive materials could not cause an unmonitored release or release of airborne effluents in excess of 10CFR20 Appendix B Table 2, Column 1, limits to unrestricted areas.

The procedure specifies the evaporation process NOT include water containing volatile radioactive species, of which tritium was the only known volatile radioactive material used at the

St Albans facility. The historical information for the facility identified potential isotopes of concern (Sr-90, C-14, H-3). The characterization information only identified Sr-90 as the isotope of concern for fixed contamination within the facility. Since the characterization did not address the liquids, it was determined to include the three historical isotopes of concern for analytical testing of the liquid.

Water was tested by Severn Trent Services, STL, St. Louis, MO and the results for the C-14 and H-3 were all non-detects. The results for the Sr-90 indicated small levels of residual radioactive material up to 200 pCi/L. The procedures for the evaporation process were implemented and the drums were then used to dispose of other radioactive wastes from the project.

- b. The second issue identified by the EPA is that the Final Remedial Action Report, Appendix B, Table 5-1 identifies an investigation level of 2,000 dpm/100 cm². Section 6 of Appendix B identifies maximum levels within each survey unit and survey units SU001A, SU001B, SU002, SU004, and SU008A maximum level exceed the 2,000 dpm/100 cm². USACE feels that the report could be misleading as written and additional information concerning the issue is provided below.

The 2,000 dpm/100 cm² investigation level was established by the field team to have a high level of confidence that the residual radioactive material was removed to levels below the NRC screening criteria of 8,700 dpm/100 cm². In section 5.0 of Appendix B it discusses surface scans and states "Results were recorded and locations exceeding investigation levels were reported to management (i.e. Stone & Webster), investigated, and when appropriate remediated. This statement would be better suited in Section 6. But it should be noted that this investigation level was primarily used during the remedial action survey to identify areas that could require remediation to meet the site DCGL. While some of these surface areas may contain small amounts of residual activity, all areas at the St. Albans facility were remediated to meeting the NRC published screening criteria of 8,700 dpm/100 cm².

Another point to consider is that all survey units except SU008A had significant destructive remediation and will require significant renovation prior to anyone occupying these areas. SU008A was an area not identified for remediation due to the fact that the residual activity levels were not identified above the DCGL. It should be noted that SU008A was historically a machine room and will also require significant renovation prior to anyone occupying this area.

3. If there are any additional questions concerning the remedial actions conducted at St. Albans facility please feel free to contact me at 732-435-0079 or the technical point of contact Mr. Hans Honerlah at 410-962-9184.

Sincerely

David Brouwer
Project Manager
USACE, New York District