Schedule 21a--Activity Narrative FY 1977

LASL Radioactive Solid Waste Disposal Site Studies

1308 General

A This program developed concurrently with an evaluation, by the U. S. Geological Survey (USGS), of the adequacy of existing monitoring systems associated with solid radioactive waste disposal sites in Los Alamos. Efforts by LASL staff members and USGS personnel have identified several interest areas where further information is required prior to the design of effective monitoring systems. Work in FY 76a, FY 77 and FY 78 will be directed at obtaining this information and establishing a site-specific monitoring network.

Geologic mapping of the areas adjacent to the LASL disposal sites will continue from FY 77 into FY 78, culminating in the production of a detailed geologic map. This mapping will permit the identification of possible pathways for radionuclide migration from the waste disposal sites. [Coring of several horizontal

B access holes beneath a representative completed waste disposal pit is scheduled for late FY 76. Analysis of the core samples, and measurements in the access holes during FY 77 will indicate the nature of any downward movement of radionuclides and the benefit of constructing further core holes during FY 78. In conjunction with the geologic mapping program, field studies will be performed during both years at selected waste disposal sites to determine the hydrologic environment and distribution of radionuclides in and adjacent to the sites. This information will aid in the proper placement of monitoring systems in FY 78. Geophysical and other studies, scheduled for FY 77 and FY 78 will provide information on

the subsurface hydrologic and geologic conditions which may effect both short and long term containment ability of LASL disposal sites. Finally, instrumentation will be developed during FY 77 to monitor the possible migration of radionuclides from LASL disposal sites. These systems are scheduled for installation and field testing during FY 78, with further modifications as required.

Schedule 46--Capital Equipment Narrative

LASL RADIOACTIVE SOLID WASTE DISPOSAL SITE STUDIES

Capital monies in the amount of $11K will be used to purchase equipment for subsurface investigations of existing waste disposal sites. A resistivity survey instrument and magnetometer will be used in the exact location of waste disposal pits within specific disposal sites. Location of these pits is essential to the installation of monitoring systems to detect possible radionuclide migration. Acquisition of this equipment is an expansion of the present program. Such expansion is essential to the effective completion of the program's objectives.