

## Small Tank Waste Retrieval from TA50 at Los Alamos National Laboratory

The US Department of Energy has a large inventory of storage tanks with unique geometries containing radioactively contaminated wastes. Specifically, the TA 50 Facility at the Los Alamos National Laboratory (LANL) has a number of tanks that contain residual waste that is encrusted onto the walls as well as the low points of the tanks and contain a large amount of solid debris. A system was required to mix, mobilize and retrieve the encrusted/solid waste. To meet the diverse requirements of this tank retrieval project, the design of the system utilized a simple manipulator to direct the intake to the charge vessel where it was needed.



NuVision Engineering prepared a conceptual design of a retrieval system and followed this with a series of proving trials for retrieving wastes. These trials established the behavior of the proposed system with each major waste type expected to be encountered at the site and provided design information, which was then passed on to the system designers for incorporation into the final design. The system was fabricated, shipped to site and operated to remove the solids deposits to the stage where man-entry was possible.

