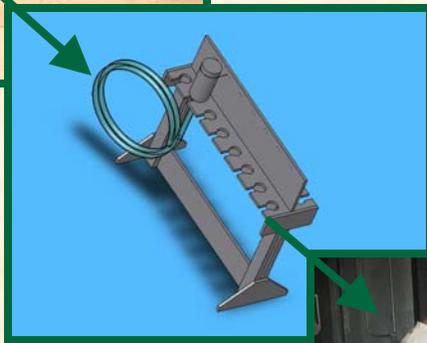


Oak Ridge National Laboratory SNS Mercury Recycle Initiative

As one of the Oak Ridge National Laboratory (ORNL)'s Environmental Management System's 2007 objectives and targets, the Spallation Neutron Source (SNS) facility identified 14 pallets containing a total of 605 empty flasks that had been used to store mercury that were no longer needed. Therefore, SNS examined various possibilities for reuse/disposition of the flasks. SNS determined that the residual mercury in the flasks would need to be drained before the empty flasks could be reused/dispositioned. SNS designed, fabricated, used, and dismantled a mercury flask drainage rack that allowed 342 pounds (155 kilograms) to be recovered and stored in 5 flasks for future use.



The work area was dismantled and decontaminated, and all tools were decontaminated. SNS also moved the mercury reservoir/pressure vessel to a different location for potential future use. The resulting wastes were properly dispositioned including the 2.5 kg of residuals and other associated solid wastes placed in a 55-gallon drum.



Due to this SNS initiative, the empty flasks did not have to be managed as hazardous waste, and the residual mercury was recovered for future use..



Consequently, this initiative:

- reduced ORNL's environmental impact
- recovered 155 kilograms of mercury for future use,
- eliminated the generation of approximately 2,049 kilograms of waste, and
- resulted in an estimated cost avoidance of more than 60 thousand dollars.

