

N366. Radiation Protection: Utilizing A Digital Camera

The radiation protection department at Vermont Yankee Nuclear Power Plant uses a digital camera to create photo maps of high radiation work areas. Unlike conventional line-drawn maps, the photographic maps actually show a picture of an area and high-light the sources of exposure.

Radiation protection technicians photograph the area with the digital camera and then download the computer images to a personal computer. They then make the pictures as clear as possible, label valves and other features, and mark the high-radiation areas and dose rates. They also print the resulting photo map with a color printer.

As part of ALARA planning, workers can check the photo maps before entering a high-radiation area, allowing them to see high-dose areas prior to beginning work.

During the last outage at Vermont Yankee, technicians took photos of valves and superimposed them on plant layouts to help workers find the valves as quickly as possible. The photo were also used in planning - for example, to determine the type of staging needed to work on a particular valve.

The technicians also carry the digital camera on their plant tours and photograph material condition or other deficiencies to call them to the attention of the appropriate department. In addition, the cameras are used to document problems found during equipment troubleshooting. The digital camera is turning out to be an invaluable tool for radiation protection at Vermont Yankee.

For more, "Radiation Protection," pg.32, The Nuclear Professional, Spring 1995. For further information, contact Remi morrisette, ALARA engineer, Vermont Yankee, Phone: 802/258-5472.