

Date: Thu, 30 Sep 1999 08:19:49 -0600
From: Meredith Brown <racer@lanl.gov>
Subject: Blue Alert: Bright Lights May Trigger CAM

Project Hanford Lessons Learned

Title: Bright Lights May Trigger ALPHA-6A CAM Alarms

Date: September 23, 1999 Identifier: 1999-RL-HNF-0035

Lessons Learned Statement: ALPHA-6A Continuous Area Monitors (CAM) are sensitive to certain frequencies of light and should be shielded from strong light sources, including camera flashes and strobe-type warning lights, to prevent unintended alarms.

Discussion of Activities: In mid-August at the Waste Receiving and Processing Facility, an assistant to a technical trainer was taking pictures of plant equipment in the shipping and receiving area to be used in updating lesson plans. A flash from the assistant's digital camera perturbed an ALPHA-6A CAM and triggered an alarm.

Analysis: Although the ALPHA-6A CAM is designed to detect only highly energetic alpha particle events, the detector is also sensitive to visible light and is particularly susceptible to strobe lights, including its own alarm beacon.

Recommended Actions: Facility managers should ensure that their ALPHA-6A CAMS are protected from strong light sources such as camera flashes and strobe lights to minimize false alarms from those sources. Personnel using bright lights (e.g. flash cameras) near ALPHA-6A CAMS should mask the CAM from the light source.

Priority Descriptor: BLUE/Information

Functional Categories (DOE): Conduct of Operations

Functional Categories (Hanford specific): Instrumentation & Controls

Originator: Fluor Daniel Hanford, Inc.

Contact: Project Hanford Lessons Learned Coordinator; (509) 373-7664;

FAX 376-5243; e-mail: PHMC_Lessons_Learned@rl.gov

Authorized Derivative Classifier: Roger Terry (509) 372-3343

Reviewing Official: John Bickford

Keyword(s): ALPHA-6A CAM; unexpected alarm; camera flash

References: HNF-PRO-644, Eberline Alpha-6A CAMs