

ATTACHMENT

Report for Unauthorized Disassembly of Liquid Scintillation Detector Cooper Nuclear Station, Docket No. 50-298, DPR-46

Description of Event

On December 14, 2023, an out-of-service liquid scintillation detector was partially disassembled by a chemistry technician without notifying Radiation Protection or adhering to label requirements. This detector is a general license device under 10 CFR 31.5. The chemistry technician had removed the back panel of the device containing a radioactive material label. The power cord was unplugged from the device, but the on/off switch and associated electrical components appeared to be intact. Upon further investigation, Radiation Protection verified the source, and its associated shielding, were not removed from the device and were intact.

The general license device specifics are as follows:

Manufacturer:	Perkin Elmer; Model Number B291000
Serial Number:	DG11095729
Source Type:	Ba-133
Curies:	18.8 μ Ci (at the time of manufacture) 7.5 μ Ci (at the time of event discovery)

General license devices are only allowed to be installed, dismantled, relocated, repaired, and/or tested by the manufacturer or individuals who are licensed. Therefore, Cooper Nuclear Station is reporting this event per 10 CFR 31.5(c)(5) due to potential damage induced to the general license device from the unauthorized disassembly.

Remedial Actions Taken

Radiation Protection performed follow-up contamination surveys of the detector and disassembled parts. Those surveys identified no detectable activity. The vendor was also contacted to verify the source and source shielding were intact. The general license device has not been re-assembled and all pieces and parts were secured and labeled by the Radiation Protection department. The vendor will perform disassembly and removal of the source.