



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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NRC PUBLISHES INFORMATION NOTICE ON GROUNDWATER CONTAMINATION DUE TO LEAKS

The NRC is informing all operators of nuclear power plants and research and test reactors, including those currently undergoing decommissioning, about recent examples of groundwater contamination at reactor sites due to undetected leaks from facility structures, systems or components.

Nuclear power plant operators have recently informed the NRC of several leaks from spent fuel pools and underground pipes. None of these events has impacted public health, but given one example of contamination migrating off a reactor site, the NRC is sharing its plans for addressing the issue as well as lessons learned to this point in time.

The NRC's Information Notice reminds plant operators that while the agency's regulations require environmental monitoring related to planned releases of slightly radioactive water from facilities, operators should not assume information from that monitoring will provide full understanding of potential undetected contamination.

The notice describes several lessons learned, including:

- Variable evaporation rates from spent fuel pools, as well as water transfer activities during refueling operations, can complicate efforts to detect small leaks;
- Plant operators should consider monitoring groundwater that leaks into rooms below ground level, in order to exclude contaminated leakage from the plant as the leak source;
- Groundwater monitoring and sample analysis should be able to detect isotopes common to nuclear power plant operation; and,
- Onsite monitoring and sampling programs could be the only reliable method for detecting repeated leakage, particularly underground leakage.

The notice is available on the agency's Web site, by entering accession number ML060540038 at this address: <http://adamswebsearch.nrc.gov/dologin.htm> . Questions should be directed to Timothy Frye (phone 301-415-9676 or tjf@nrc.gov). The agency also recently announced the creation of a task force to examine the issue of inadvertent, unmonitored releases of radioactive liquids containing tritium from U.S. commercial nuclear power plants. General information regarding groundwater contamination is available on the NRC's Web site at this address:

<http://www.nrc.gov/reactors/operating/ops-experience/grndwtr-contam-tritium.html> .

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