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Australian Nuclear Science and Technology Organisation

## Media Release

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### OPAL reactor water seepage safe

Following further media reports today and misleading comments from the Greens, ANSTO<sup>1</sup> restates that water seepage within the OPAL nuclear research reactor poses no safety risk. This has been confirmed by the independent nuclear safety regulator, ARPANSA<sup>2</sup>.

ANSTO has been vigilant over the past few months in informing the public about the situation at OPAL, where about two to three cups a day of light, or normal water, are seeping into the heavy water which is contained within the reflector vessel that surrounds the core. Regularly updated information about the state of OPAL is available at

[http://www.ansto.gov.au/discovering\\_ansto/anstos\\_research\\_reactor/reactor\\_status.html](http://www.ansto.gov.au/discovering_ansto/anstos_research_reactor/reactor_status.html).

The reflector vessel in turn sits inside a 13 metre deep pool of light water, designed to keep the reactor cool and provide radiation shielding to workers. The heavy water's job is to reflect neutrons back into the core in order to sustain the nuclear reaction and provide high quality neutrons for science.

The water seepage was first identified in 2006, and ANSTO undertook some repairs during an extended shutdown from July 2007 until May this year, caused by a fuel design fault. This involved injecting microscopic alumina particles into the affected area. However, this was only partially successful.

The water seepage is totally internal and does not prevent reactor operation; however, the dilution of the heavy water will reduce efficiency over time. ANSTO is confident that INVAP, the reactor's designer, will provide a solution. Several options are currently being investigated, one of which is a heavy water treatment plant.

Although the seepage raised no safety concerns, ARPANSA is continually being advised of the situation.

The Greens have been invited on many occasions to visit OPAL to be briefed on the reactor and the environmental work ANSTO conducts, but have not as yet taken up the offer. This invitation remains open to all senators and MPs.

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**For more information please contact ANSTO Media Relations Manager, Sharon Kelly, on (02) 9717 9575 or 0400 394 085**

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<sup>1</sup> Australian Nuclear Science and Technology Organisation

<sup>2</sup> Australian Radiation Protection and Nuclear Safety Agency