International Atomic Energy Agency Safeguards

Figure 6

IAEA Inspections: Installing and Checking Containment Seals

VECL



Under the auspices of the Canadian Safeguards Support Programme, Atomic Energy of Canada Ltd. has developed several pieces of equipment for the use of IAEA inspectors. Among them is the ultrasonic random coil seal (A) which is designed to be used underwater on stacks containing spent CANDU





reactor fuel. They are installed using a long rod (B) and can be routinely checked by inspectors using an electronic probe and a special Seal Pattern Reader (C). Each seal contains a wire coil. When an ultrasonic wave is sent to the seal, the coil creates a unique reflection pattern which is destroyed if the seal is tampered with or removed (D).

Installation and checking of containment equipment such as seals is an important element of the work conducted on site by IAEA inspectors. The ultrasonic random coil seal illustrated here is one of a variety of seals used by the IAEA.

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