Chalk River Laboratories' Employee Safety Performance

AECL's <u>Health and Safety Policy #00-009</u> commits AECL to limit exposures to radioactive materials to ensure that doses are kept below regulatory limits and are as low as reasonably achievable, taking into account social and economic factors (the ALARA principle).

AECL has an extensive dosimetry monitoring program to measure the dose to AECL's employees, contractors and visitors. This program meets the regulatory standard S-106 and is licenced by the Canadian Nuclear Safety Commission (CNSC). Dosimetry results are regularly submitted to the Canadian Nuclear Safety Commission (CNSC) as confirmation that we are operating safely. This information is also available to the public through our website, upon request and through other community relations initiatives.

Click here for the most recent report Health and Safety Performance Report.

Radiation Dose Experience at CRL

The dose of radiation is expressed as *millisieverts (mSv)*, an internationally accepted unit for measuring radiation and its biological effects.

The CNSC regulatory limit of wholebody dose for a Nuclear Energy Worker is **50 mSv per year and 100 mSv in a 5-year period**.

Typically, Canadians receive between 2 and 4 mSv per year from a number of sources shown in the following link: Comparison of Radiation Sources

Over the past five years, doses to Chalk River workers have shown a consistent trend of being well below regulatory limits. This is expected to continue in 2006 even with a projected rise in collective doses to workers due to the increase in the number of staff working at the site and because of the initiation of various decommissioning and other site-related projects.





*Data for 2006 to date. Employees' personal dosimetry badges are regularly read and processed every four weeks.

Conventional (Occupational) Safety Performance at AECL

AECL is committed to protecting our employees, contractors working at all sites and visitors from hazardous conditions, accidents and injuries in the workplace. AECL, as a federal Crown corporation, complies with the requirements of the Canada Labour Code Part II and of the Canada Occupational Health and Safety (COHS) Regulations made under the Code.

AECL maintains several measures of safety performance. The two shown here are "**frequency**", defined as the number of injuries to AECL employees resulting in a recordable lost time per 200,000 person-hours worked, and "**severity**", defined as the number of lost workdays per 200,000 person-hours worked. The typical frequency and severity for the average industry in North America is approximately 1.5 and 35 respectively.

AECL's joint employee/management Site Safety and Health Committees are committed to addressing safety concerns and improving our safety performance at our various sites.

AECL's 2005-2006 Safety Performance Record

AECL's drive toward industry best practices continues to be reflected in the ongoing reduction in the frequency and severity of our lost time injuries. Our FY 2005 – 2006 frequency and severity rate reduction targets (15% less than average of previous 2 years) were achieved. The launch of a new Safety Culture initiative in early 2005, including awareness training in the areas of human performance and error-free tools, contributed to our continuing performance improvements.

Safety Performance Frequency





Frequency = Number of Recordable Lost Time Injuries (RLTI) per 200,000 person-hours of exposure. Severity = Number of work days lost as a result of RLTI per 200,000 person-hours of exposure.