



The State Government reversed the former Government's ban on uranium mining in Western Australia on November 17, 2008.

The State Government is:

- Committed to ensuring that the State's regulatory framework is world's best practice and that associated government departments have the resources to manage radiation issues associated with uranium mining;
- Committed to supporting the mining and export of uranium for peaceful purposes only;
- Committed to learning from the experience of the South Australian and Northern Territory governments on monitoring and regulating uranium mining; and is
- Committed to engaging with industry and properly informing all stakeholders, particularly local and indigenous communities potentially affected by the development of mine sites and transport routes.

The State Government will not:

- Support the construction or operation of a nuclear power facility in the State and has legislation in place to prevent nuclear waste being brought into the State; and will not
- Allow the export of uranium through any ports surrounded by residential development.

## Uranium resources in WA

- Western Australia has known resources of 189,000 tonnes of uranium oxide in 29 projects and has significant potential for discovering more.
- Australia has 36 per cent of known global reserves of uranium of which Western Australia has five to eight per cent.
- The known uranium deposits in Western Australia are found in remote areas of the Kimberley, the Pilbara region and a significant amount in the Midwest, North Eastern and South Eastern Goldfields.
- Although uranium mining was banned until November 2008, the exploration of uranium was not. As a result there are five companies with projects in WA that are already significantly advanced and are expected to commence in, or after, 2012.
- Due to high demand for nuclear power, the price of uranium is holding firm at a time when most commodities are suffering a downward trend.
- Investment in uranium mining has the potential to offer a significant financial return for Western Australia in this otherwise unsettled global financial market.
- It will provide another source of employment for Western Australians and bring economic benefits to the State.

## Regulation of the industry

- Regulations are already in place regarding the mining of radioactive material in Western Australia.
- Mineral sands and tantalum are minerals which contain radioactive material and have been mined, transported within and exported from the State for 40 years.
- Regulation of the industry will be administered by the Department of Mines and Petroleum's Resources Safety Division and Environment Division, and the Radiological Council of Western Australia.
- Safety for the industry is regulated under *Mines Safety and Inspection Regulations 1995* and *Radiation Safety Act 1975*.
- Current mineral sands workers have the most up-to-date workplace health information which is considered a benchmark world-wide by industry experts for radiation safety practices.
- An inter-agency uranium working group has been formed to review current legislation and regulations, and to identify any additional technical resources required to deal with uranium mining issues.
- The State Government is engaging with the South Australian and Northern Territory Governments to learn from their experience in monitoring and regulating uranium mining.
- The transportation of material from uranium mining sites is regulated by the Commonwealth, State and Territory jurisdictions and currently abides by the Code of Practice for the Safe Transport of Radioactive Substances 1990, which is based on international guidelines for the transportation of such materials.
- The successful development of the Western Australia uranium sector is further supported by the State's involvement in the Uranium Industry Framework Implementation Group. The group includes the South Australian and Northern Territory governments who have a long history of monitoring and regulating uranium mining.
- The State Government will ensure any uranium mining proposal must meet stringent standards for environmental, occupational health and safety and transportation to mine and export uranium in this state.
- Mining proposals will be subject to regulation under the *Environmental Protection Act* and the *Commonwealth Environment Protection and Biodiversity Conservation Act*.

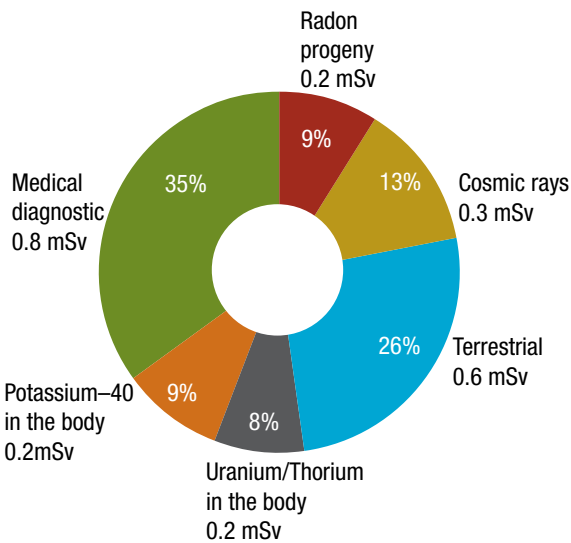


## Radiation and uranium<sup>1</sup>

Ionizing radiation has always been a part of the human environment. We are all exposed to natural background radiation from a variety of sources:

- gamma radiation from uranium, thorium, and potassium in the ground,
- radon gas in the air,
- cosmic rays from outer space, and
- radioactive elements in our food.

Along with natural radioactive sources present in the Earth's crust and cosmic radiation, man-made sources also contribute to our continuous exposure to ionizing radiation. The typical exposure levels for Australia are:



## Australian annual per capita radiation dose from natural and medical sources

Source: <http://www.arpana.gov.au/radiationprotection/basics/understand.cfm>

The world-wide population average annual dose from natural background radiation is about 2 or 3 milliSieverts (mSv) per year.

A typical uranium mine worker is exposed to about 5 mSv in addition each year

A typical radiation dose rate from a drum of Yellow cake at 1 metre is approximately 0.015 mSv per hour.

To put this in perspective:

- a dental x-ray is about 0.005 mSv
- an arm or leg x-ray is 0.02 to 0.05 mSv
- a CAT scan is about 10 to 20 mSv
- the annual occupational limit for uranium workers is 20 mSv
- in some areas of Brazil, India, and China the annual background radiation exposure to the population is between 10 and 200 mSv
- short-term exposure of between 500 and 1000 mSv will result in low-level radiation sickness.

1. Radiation and uranium information compiled by Resources Safety Division Senior Scientific Officer (radiation) Ivan Fetwadjieff.

For further information on uranium mining in Western Australia please visit [www.dmp.wa.gov.au](http://www.dmp.wa.gov.au)

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