

## Uranium mining and milling

On average, uranium ore contains about 1% uranium oxides, but this percentage can vary considerably from site to site (from 0.1% up to 10% at a Canadian site). During the mining and milling processes, the uranium oxides are extracted and purified. Given the 1% figure, one can imagine that this first stadium of the fuel "cycle" creates very large amounts of waste, which are easily overlooked in radwaste discussions. You should also keep in mind that part of the ore that is dug up is of low grade (it contains too little uranium to be of economic interest) and this is considered waste as well.

Thus, the waste arising from mining and milling activities is actually the largest volume by far when compared to the other steps of the "cycle". If proper coverage of this waste is absent, radon gas will escape. It is commonly known that radon -- which is an alpha emitter -- causes lung cancer, so it's not difficult to imagine the health threats the mining stage can induce. Australia, for instance, does not have commercial nuclear power plants (think of the nuclear testing by the British and the French in that area), but there are uranium mines exploited by the French, which is somewhat inconsistent to say the least.