

##Radioactive Waste Bioremediation Act

###AN ACT To reduce the amount of radioactive and heavy metal wastes produced by nuclear power plants in the United States.

Whereas the use of nuclear power is likely to increase in the future

Whereas current methods of nuclear waste control used in the United States are both expensive and focused on simply containing, rather than eliminating waste;

Whereas the failure of these containment methods can cause severe environmental and health damage;

Whereas it is the responsibility of the Congress of the United States to protect the health of both its people and the environment;

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Section I: Title

** (a) ** This act may be cited as the “Radioactive Waste Bioremediation Act” or the “RWBA”

Section II: Definitions

** (a) ** Nuclear waste shall refer to the byproducts of controlled nuclear fission reactions which do not have any useful application.

>**(1)** Radioactive waste shall be synonymous with nuclear waste.

>**(2)** Nuclear waste shall be considered eliminated when its radioactivity and toxicity have been reduced to levels considered safe for the environment and humans.

>**(3)** Nuclear waste shall be considered immobilized when it has been chemically converted into a non-soluble form.

** (b) ** Bioremediation shall refer to the use of living organisms, genetically modified or otherwise, to remove contaminants from the natural environment.

(c) Radiotrophic organism shall refer to any living entity which is capable of metabolizing radioactive substances.

(d) The DoE shall refer to the Department of Energy, as outlined in [42 US Code Chapter 84 Subsection II § 7131](<https://www.law.cornell.edu/uscode/text/42/7131>)

(e) Non-industry research teams shall refer to any group of scientific researchers who are neither affiliated with nor receiving funds from any bioremediation company.

(f) The NRC shall refer to the Nuclear Regulatory Commission, as outlined in [42 US Code Chapter 73 Subsection II § 5841](<https://www.law.cornell.edu/uscode/text/42/5841>)

Section III: Findings

(a) This Congress finds that:

(1) Nuclear power is likely to grow as a fraction of total US energy production for the foreseeable future.

(2) There are no methods of actively eliminating nuclear waste, which is typically stored until it has decayed.

(3) Current methods of containing nuclear wastes are expensive, and the creation of new storage sites is often highly controversial.

(4) A number of radiotrophic organisms, such as *D. radiodurans*, which show enormous potential as possible agents of bioremediation have been discovered in recent years.

(5) The elimination of nuclear wastes by bioremediation would reduce the need for costly containment methods and the risk of accidental spills or leakages.

Section IV: Bioremediation Research

(a) The DoE shall be appropriated \$8,000,000 to disperse as grants among no more than 20 non-industry research teams to develop techniques to utilize known radiotrophic organisms in bioremediation contexts.

(1) The Secretary of Energy shall prescribe regulations under which the DoE shall assign these grants.

>** (2) ** Any techniques discovered by these teams shall not be eligible to be patented.

****Section V: Application****

**** (a) **** Using one or more of the techniques identified by the DoE's research, the NRC shall develop a strategy to eliminate or immobilize all nuclear waste stored in the United States within 20 years of its implementation.

>**** (1) **** The NRC shall present its plan to the appropriate Congressional committees within 500 days of the completion of all of the research projects funded by the DoE in accordance with Section IV (a).

>**** (2) **** If any changes are made to this plan, the NRC must report the same to the appropriate Congressional committees within 100 days of their implementation.

**** (b) **** The NRC shall make a presentation to the appropriate Congressional committees regarding the progress of this bioremediation program every 2 years after its implementation.

**** (c) **** The NRC shall be appropriated any funds necessary to implement its strategy.

****Section VI: Enactment****

**** (a) **** This bill shall come into effect immediately upon its passage.

**** (b) **** The provisions of this act are severable. If any provision of this Act is found to be invalid or unconstitutional, the remainder of this Act shall still hold the force of law.

This act was written and sponsored by Rep. /u/NapoleonHobbes (D-US) and cosponsored by Rep. /u/Adithyansoccer (D-DX-4), Rep. /u/NeatSaucer (D-US), Rep. /u/oath2order (D-US), and Rep. /u/madk3p (D-LN-1)