HIGH LEVEL NUCLEAR WASTE DISPOSAL

1998 GENERAL SESSION

STATE OF UTAH

Sponsor: Craig A. Peterson

AN ACT RELATING TO THE ENVIRONMENT AND HEALTH; PROVIDING LEGISLATIVE INTENT; ESTABLISHING PROCEDURES, REQUIREMENTS, AND FEES FOR LICENSURE TO OPERATE A HIGH LEVEL NUCLEAR WASTE FACILITY OR A GREATER THAN CLASS C RADIOACTIVE WASTE FACILITY IN THE STATE: REOUIRING CERTAIN SAFETY ASSURANCES IN ORDER TO TRANSPORT THESE WASTES WITHIN THE STATE; AND SPECIFYING REQUIREMENTS REGARDING TRANSPORTATION, SURETY FOR MAINTENANCE OF A FACILITY, AND FINANCIAL RESPONSIBILITY FOR ANY RELEASES OF THE NUCLEAR WASTE. This act affects sections of Utah Code Annotated 1953 as follows: **AMENDS:**

19-3-301, as last amended by Chapter 227, Laws of Utah 1993

ENACTS:

19-3-302	Utah	Code	Annotated	1953

19-3-303, Utah Code Annotated 1953

19-3-304, Utah Code Annotated 1953

19-3-305, Utah Code Annotated 1953

19-3-306, Utah Code Annotated 1953

19-3-307, Utah Code Annotated 1953

19-3-308, Utah Code Annotated 1953

19-3-309, Utah Code Annotated 1953

19-3-310, Utah Code Annotated 1953

19-3-311, Utah Code Annotated 1953

19-3-312, Utah Code Annotated 1953

19-3-313, Utah Code Annotated 1953

19-3-314, Utah Code Annotated 1953

19-3-315, Utah Code Annotated 1953

19-3-316, Utah Code Annotated 1953

19-3-317, Utah Code Annotated 1953

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **19-3-301** is amended to read:

19-3-301. Restrictions on nuclear waste placement in state.

The state [shall] may not approve the placement, including transfer, storage, decay in storage, treatment, or disposal, in Utah of high level nuclear waste or greater than class C radioactive waste unless the governor, after consultation with the county executive and county legislative body of the affected county and with concurrence of the Legislature, specifically approves [such] the placement as provided in this part.

Section 2. Section **19-3-302** is enacted to read:

19-3-302. Legislative intent.

- (1) The state of Utah enacts this part to regulate transportation, transfer, storage, decay in storage, treatment, and disposal of any high level nuclear waste and greater than class C radioactive waste in Utah, thereby asserting and protecting the state's interests in environmental and economic resources consistent with 42 U.S.C.A. 2011 et seq., Atomic Energy Act and 42 U.S.C.A. 10101 et seq., Nuclear Waste Policy Act.
- (2) Neither the Atomic Energy Act nor the Nuclear Waste Policy Act provides for siting a large privately owned high level nuclear waste transfer, storage, decay in storage, or treatment facility away from the vicinity of the reactors. The Atomic Energy Act and the Nuclear Waste Policy Act specifically define authorized storage and disposal programs and activities. The state of Utah in enacting this part is not preempted by federal law, since any proposed facilities that would be sited in Utah are not contemplated or authorized by federal law and, in any circumstance, this part is not contrary to or inconsistent with federal law or Congressional intent.
- (3) The state of Utah has environmental and economic interests which do not involve nuclear safety regulation, and which must be considered and complied with in siting a high level nuclear waste or greater than Class C radioactive waste transfer, storage, decay in storage, treatment, or

disposal facility and in transporting these wastes in the state.

(4) An additional primary purpose of this part is to ensure protection of the state from nonradiological hazards associated with any waste transportation, transfer, storage, decay in storage, treatment, or disposal.

- (5) The state recognizes the sovereign rights of Indian tribes within the state of Utah.

 However, any proposed transfer, storage, decay in storage, treatment, or disposal facility located on a reservation which directly affects and impacts state interests by creating off-reservation effects such as potential or actual degradation of soils and groundwater, potential or actual contamination of surface water, pollution of the ambient air, emergency planning costs, impacts on development, agriculture, and ranching, and increased transportation activity, is subject to state jurisdiction.
- (6) There is no tradition of regulation by the Indian tribes in Utah of high level nuclear waste or higher than class C radioactive waste. The state does have a long history of regulation of radioactive sources and natural resources and in the transfer, storage, treatment, and transportation of materials and wastes throughout the state. The state finds that its interests are even greater when nonmembers of an Indian tribe propose to locate a facility on tribal trust lands primarily to avoid state regulation and state authorities under federal law.
- (7) (a) This part is not intended to modify existing state requirements for obtaining environmental approvals, permits, and licenses, including surface and groundwater permits and air quality permits, when the permits are necessary under state and federal law to construct and operate a high level nuclear waste or greater than class C radioactive waste transfer, storage, decay in storage, treatment, or disposal facility.
- (b) Any source of air pollution proposed to be located within the state, including sources located within the boundaries of an Indian reservation, which will potentially or actually have a direct and significant impact on ambient air within the state, is required to obtain an approval order and permit from the state under Section 19-2-108.
- (c) Any facility which will potentially or actually have a significant impact on the state's surface or groundwater resources is required to obtain a permit under Section 19-5-107 even if located within the boundaries of an Indian reservation.

(8) The state finds that the transportation, transfer, storage, decay in storage, treatment, and disposal of high level nuclear waste and greater than class C radioactive waste within the state is an ultra-hazardous activity which carries with it the risk that any release of waste may result in enormous economic and human injury.

Section 3. Section **19-3-303** is enacted to read:

19-3-303. Definitions.

As used in this part:

- (1) "Greater than class C radioactive waste" means low-level radioactive waste that has higher concentrations of specific radionuclides than allowed for class C waste.
 - (2) "High level nuclear waste" has the same meaning as in Section 19-3-102.
- (3) "Rule" means a rule made by the department under Title 63, Chapter 46a, Utah Administrative Rulemaking Act.
- (4) "Storage facility" means any facility which stores, holds, or otherwise provides for the emplacement of waste regardless of the intent to recover that waste for subsequent use, processing, or disposal.
- (5) "Transfer facility" means any facility which transfers waste from and between transportation modes, vehicles, cars, or other units, and includes rail terminals and intermodal transfer points.
- (6) "Waste" or "wastes" means high level nuclear waste and greater than class C radioactive waste.

Section 4. Section **19-3-304** is enacted to read:

<u>19-3-304.</u> Licensing and approval by governor and Legislature -- Powers and duties of the department.

- (1) (a) A person may not construct or operate a waste transfer, storage, decay in storage, treatment, or disposal facility within the exterior boundaries of the state without applying for and receiving a construction and operating license from the state Department of Environmental Quality and also obtaining approval from the Legislature and the governor.
 - (b) The Department of Environmental Quality may issue the license, and the Legislature and

the governor may approve the license, only upon finding the requirements and standards of this part have been met.

- (2) The department shall by rule establish the procedures and forms required to submit an application for a construction and operating license under this part.
- (3) The department may make rules implementing this part as necessary for the protection of the public health and the environment, including:
- (a) rules for safe and proper construction, installation, repair, use, and operation of waste transfer, storage, decay in storage, treatment, and disposal facilities;
- (b) rules governing prevention of and responsibility for costs incurred regarding accidents that may occur in conjunction with the operation of the facilities; and
- (c) rules providing for disciplinary action against the license upon violation of any of the licensure requirements under this part or rules made under this part.

Section 5. Section **19-3-305** is enacted to read:

<u>19-3-305.</u> Application for license.

The application for a construction and operating license shall contain information required by department rules, which shall include:

- (1) results of studies adequate to:
- (a) identify the presence of any groundwater aquifers in the area of the proposed site;
- (b) assess the quality of the groundwater of all aquifers identified in the area of the proposed site;
 - (c) provide reports on the monitoring of vadose zone and other near surface groundwater;
 - (d) provide reports on hydraulic conductivity tests; and
- (e) provide any other information necessary to estimate adequately the groundwater travel distance;
- (2) identification of transportation routes and transportation plans within the state and demonstration of compliance with federal, state, and local transportation requirements;
- (3) estimates of the composition, quantities, and concentrations of waste to be generated by the activities covered by the license;

(4) the environmental, social, and economic impact of the facility in the area of the proposed facility and on the state as a whole;

- (5) detailed engineering plans and specifications for the construction and operation of the facility and for the closure of the facility;
- (6) detailed cost estimates and funding sources for construction, operation, and closure of the facility;
- (7) a security plan that includes a detailed description of security measures that would be installed in and around the facility;
- (8) a detailed description of site suitability, including a description of the geologic, geochemical, geotechnical, hydrologic, ecologic, archaeologic, meteorologic, climatologic, and biotic features of the site and vicinity;
 - (9) specific identification of:
- (a) the applicant, the wastes to be accepted, the sources of waste, and the owners and operators of the facility; and
 - (b) the persons or entities having legal responsibility for the facility and wastes;
- (10) quantitative and qualitative environmental and health risk assessments for all proposed activities, including transfer, storage, and transportation of wastes;
- (11) technical qualifications, including training and experience of the applicant, staff, and personnel who are to engage in the proposed activities;
- (12) a quality assurance program, radiation safety program, and environmental monitoring program;
- (13) a regional emergency plan for an area surrounding the facility having at least a 75 mile radius, but which may be greater, if required by department rule; and
- (14) any other information and monitoring the department determines necessary to insure the protection of the public health and the environment.

Section 6. Section **19-3-306** is enacted to read:

19-3-306. Information and findings required for approval by the department.

The department may not issue a construction and operating license unless information in the

application:

(1) demonstrates the availability and adequacy of emergency services, including medical, security, and fire response, and environmental cleanup capabilities both at and in the region of the proposed site and for areas involved in the transport of wastes within the state;

- (2) establishes financial assurance for operation and closure of the facility and for responding to emergency conditions in transportation and at the facility as required by department rules, including proof the applicant:
- (a) possesses substantial resources that are sufficient to respond to any reasonably foreseeable injury or loss resulting from operation of the facility; and
 - (b) will maintain these resources throughout the term of the facility;
- (3) provides evidence the wastes will not cause or contribute to an increase in mortality, an increase in illness, or pose a present or potential hazard to human health or the environment;
- (4) provides evidence the personnel employed at the facility have appropriate and sufficient education and training for the safe and adequate handling of the wastes;
- (5) demonstrates the public benefits of the proposed facility, including the lack of other available sites or methods for the management of the waste that would be less detrimental to the public health or safety or to the quality of the environment;
 - (6) demonstrates the technical feasibility of the proposed waste management technology;
- (7) demonstrates conformance with federal laws, regulations, and guidelines for a waste facility;
- (8) demonstrates conclusively that any facility is temporary and provides identified plans and alternatives for closure of the facility with an enforceable schedule and identified dates for closure, including evidence that:
- (a) an identified party has irrevocably agreed to accept the waste at the end of the temporary storage period; and
 - (b) the waste will be moved to another facility;
 - (9) demonstrates that:
 - (a) the applicant is not a limited liability company, limited partnership, or other entity with

limited liability; and

(b) the applicant and its officers and directors and those principals or other entities that are participating in and associated with the applicant regarding the facility are willing to accept unlimited strict liability, consistent with federal law, for any financial losses or human losses or injuries resulting from operation of any proposed facility;

- (10) provides evidence the applicant has posted a cash bond in the amount of at least two billion dollars or in a greater amount as determined by department rule to be necessary to adequately respond to any reasonably foreseeable releases or losses, or the closure of the facility;
- (11) provides evidence the applicant and its officers and directors, the owners or entities responsible for the generation of the waste, principals, and any other entities participating in or associated with the applicant, including landowners, lessors, and contractors, consent in writing to the jurisdiction of the state courts of Utah for any claims, damages, private rights of action, state enforcement actions, or other proceedings relating to the construction, operation, and compliance of the proposed facility; and
- (12) demonstrates that any person or entity which sends wastes to a facility shall remain the owner of and responsible for the waste and its ultimate disposal and is willing to accept unlimited, strict liability, consistent with federal law, for any financial or human losses, liabilities, or injuries resulting from the wastes for the entire time period the waste is at the facility.

Section 7. Section **19-3-307** is enacted to read:

<u>19-3-307.</u> Siting criteria.

- (1) The department may not issue a construction and operating license to any waste transfer, storage, decay in storage, treatment, or disposal facility unless the facility location meets the siting criteria under Subsection (2).
 - (2) The facility may not be located:
 - (a) within or underlain by:
- (i) national, state, or county parks; monuments or recreation areas; designated wilderness or wilderness study areas; or wild and scenic river areas;
 - (ii) ecologically or scientifically significant natural areas, including wildlife management

areas and habitats for listed or proposed endangered species as designated by federal law;

- (iii) 100-year flood plains;
- (iv) areas 200 feet from Holocene faults;
- (v) underground mines, salt domes, or salt beds;
- (vi) dam failure flood areas;
- (vii) areas subject to landslide, mud flow, or other earth movement, unless adverse impacts can be mitigated;
- (viii) farmlands classified or evaluated as "prime," "unique," or of "statewide importance" by the U.S. Department of Agricultural Soil Conservation Service under the Prime Farmland Protection Act;
- (ix) areas within five miles of existing permanent dwellings, residential areas, or other habitable structures, including schools, churches, or historic structures;
- (x) areas within five miles of surface waters, including intermittent streams, perennial streams, rivers, lakes, reservoirs, and wetlands;
- (xi) areas within 1,000 feet of archeological sites regarding which adverse impacts cannot reasonably be mitigated;
- (xii) recharge zones of aquifers containing groundwater which has a total dissolved solids content of less than 10,000 mg/l; or
 - (xiii) drinking water source protection areas;
 - (b) in areas:
 - (i) above or underlain by aquifers that:
- (A) contain groundwater which has a total dissolved solids content of less than 500 mg/l; and
 - (B) do not exceed state groundwater standards for pollutants;
- (ii) above or underlain by aquifers containing groundwater which has a total dissolved solids content between 3,000 and 10,000 mg/l, when the distance from the surface to the groundwater is less than 100 feet;
 - (iii) of extensive withdrawal of water, gas, or oil;

(iv) above or underlain by weak and unstable soils, including soils that lose their ability to support foundations as a result of hydrocompaction, expansion, or shrinkage;

- (v) above or underlain by karst terrains; or
- (vi) where air space use and ground transportation routes present incompatible risks and uses; or
- (c) within a distance to existing drinking water wells and watersheds for public water supplies of five years groundwater travel time plus 1,000 feet.
- (3) An applicant for a license may request from the department an exemption from any of the siting criteria stated in this section upon demonstration that the modification would be protective of and have no adverse impacts on the public health and the environment.

Section 8. Section **19-3-308** is enacted to read:

19-3-308. Application fee and annual fees.

- (1) (a) Any application for a waste transfer, storage, decay in storage, treatment, or disposal facility shall be accompanied by an initial fee of \$5,000,000.
- (b) The applicant shall subsequently pay an additional fee to cover the costs to the state associated with review of the application, including costs to the state and the state's contractors for permitting, technical, administrative, legal, safety, and emergency response reviews, planning, training, infrastructure, and other impact analyses, studies, and services required to evaluate a proposed facility.
- (2) For the purpose of funding the state oversight and inspection of any waste transfer, storage, decay in storage, treatment, or disposal facility, and to establish state infrastructure, including, but not limited to providing for state Department of Environmental Quality, state

 Department of Transportation, state Department of Public Safety, and other state agencies' technical, administrative, legal, infrastructure, maintenance, training, safety, socio-economic, law enforcement, and emergency resources necessary to respond to these facilities, the owner or operator shall pay to the state a fee as established by department rule under Section 63-38-3.2, to be assessed:
- (a) per ton of storage cask and high level nuclear waste per year for storage, decay in storage, treatment, or disposal of high level nuclear waste;

(b) per ton of transportation cask and high level nuclear waste for each transfer of high level nuclear waste;

- (c) per ton of storage cask and greater than class C radioactive waste for the storage, decay in storage, treatment, or disposal of greater than class C radioactive waste; and
- (d) per ton of transportation cask and greater than class C radioactive waste for each transfer of greater than class C radioactive waste.
- (3) Funds collected under Subsection (2) shall be placed in the Nuclear Waste Facility Oversight Restricted Account, created in Section 19-3-309.
- (4) The owner or operator of the facility shall pay the fees imposed under this section to the department on or before the 15th day of the month following the month in which the fee accrued.
- (5) Annual fees due under this part accrue on July 1 of each year and shall be paid to the department by July 15 of that year.

Section 9. Section **19-3-309** is enacted to read:

19-3-309. Restricted account.

- (1) There is created within the General Fund a restricted account known as the "Nuclear Waste Facility Oversight Account."
 - (2) (a) The account shall be funded from the fees imposed under this part.
 - (b) The department shall deposit all fees collected under this part in the account.
- (c) The Legislature may appropriate the funds in this account to departments of state government as necessary for those departments to carry out their duties to implement this part.
 - (d) The account shall earn interest, which shall be deposited in the account.

Section 10. Section **19-3-310** is enacted to read:

19-3-310. Benefits agreement.

- (1) The department may not issue a construction and operating license under this part unless the applicant has entered into a benefits agreement with the department which is sufficient to offset adverse environmental, public health, social, and economic impacts to the state as a whole, and also specifically to the local area in which the facility is to be located.
 - (2) (a) The benefits agreement shall be attached to and made part of the terms of any license

for the facility.

(b) Failure to adhere to the benefits agreement is a ground for the department to take enforcement action against the license, including permanent revocation of the license.

(3) This part may not be construed or interpreted to affect the rights of any person or entity to brings claims against or reach agreements with the applicant for impacts from the facility independent of the benefits agreement.

Section 11. Section 19-3-311 is enacted to read:

19-3-311. Length of license.

- (1) Any construction and operating license shall be issued for a term established by department rule, but the term may not be longer than 20 years.
- (2) The term of the license may be extended beyond 20 years only by approval of the department, the Legislature, and the governor.

Section 12. Section **19-3-312** is enacted to read:

19-3-312. Enforcement -- Penalties.

- (1) When the department or the governor has probable cause to believe a person is violating or is about to violate any provision of this part, the department or the governor shall direct the state attorney general to apply to the appropriate court for an order enjoining the person from engaging in or continuing to engage in the activity.
- (2) In addition to being subject to injunctive relief, any person who violates any provision of this part is subject to a civil penalty of up to \$10,000 per day for each violation.
- (3) Any person who knowingly violates a provision of this part is guilty of a class A misdemeanor and subject to a fine of up to \$10,000 per day.

Section 13. Section **19-3-313** is enacted to read:

19-3-313. Reciprocity.

Waste may not be transported into and transferred, stored, decayed in storage, treated, or disposed of in the state if the state of origin of the waste or the state in which the waste was generated prohibits or limits similar actions within its own boundaries.

Section 14. Section **19-3-314** is enacted to read:

19-3-314. Local jurisdiction.

This part does not preclude any political subdivision of the state from establishing additional requirements under applicable state and federal law.

Section 15. Section **19-3-315** is enacted to read:

19-3-315. Transportation requirements.

- (1) A person may not transport wastes in the state, including on highways, roads, rail, by air, or otherwise, without:
 - (a) having received approval from the state Department of Transportation; and
 - (b) having demonstrated compliance with rules of the state Department of Transportation.
 - (2) The Department of Transportation may:
- (a) make rules requiring a transport and route approval permit, weight restrictions, tracking systems, and state escort; and
- (b) assess appropriate fees as established under Section 63-38-3.2 for each shipment of waste, consistent with the requirements and limitations of federal law.
- (3) The Department of Environmental Quality shall establish any other transportation rules as necessary to protect the public health, safety, and environment.

Section 16. Section 19-3-316 is enacted to read:

19-3-316. Cost recovery.

The owner or transporter or any person in possession of waste is liable, consistent with the provisions of federal law, for any expense. damages, or injury incurred by the state, its political subdivisions, or any person as a result of a release of the waste.

Section 17. Section 19-3-317 is enacted to read:

19-3-317. Severability.

If any provision of this part is held to be invalid, unconstitutional, or otherwise held to be inconsistent with law, the remainder of this part is not affected and remains in full force.