

1 **HIGH LEVEL NUCLEAR WASTE DISPOSAL**

2 1998 GENERAL SESSION

3 STATE OF UTAH

4 **Sponsor: Craig A. Peterson**

5 AN ACT RELATING TO THE ENVIRONMENT AND HEALTH; PROVIDING LEGISLATIVE
6 INTENT; ESTABLISHING PROCEDURES, REQUIREMENTS, AND FEES FOR
7 LICENSURE TO OPERATE A HIGH LEVEL NUCLEAR WASTE FACILITY OR A
8 GREATER THAN CLASS C RADIOACTIVE WASTE FACILITY IN THE STATE;
9 REQUIRING CERTAIN SAFETY ASSURANCES IN ORDER TO TRANSPORT THESE
10 WASTES WITHIN THE STATE; AND SPECIFYING REQUIREMENTS REGARDING
11 TRANSPORTATION, SURETY FOR MAINTENANCE OF A FACILITY, AND
12 FINANCIAL RESPONSIBILITY FOR ANY RELEASES OF THE NUCLEAR WASTE.

13 This act affects sections of Utah Code Annotated 1953 as follows:

14 AMENDS:

15 **19-3-301**, as last amended by Chapter 227, Laws of Utah 1993

16 ENACTS:

17 **19-3-302**, Utah Code Annotated 1953

18 **19-3-303**, Utah Code Annotated 1953

19 **19-3-304**, Utah Code Annotated 1953

20 **19-3-305**, Utah Code Annotated 1953

21 **19-3-306**, Utah Code Annotated 1953

22 **19-3-307**, Utah Code Annotated 1953

23 **19-3-308**, Utah Code Annotated 1953

24 **19-3-309**, Utah Code Annotated 1953

25 **19-3-310**, Utah Code Annotated 1953

26 **19-3-311**, Utah Code Annotated 1953

27 **19-3-312**, Utah Code Annotated 1953

- 1 **19-3-313**, Utah Code Annotated 1953
- 2 **19-3-314**, Utah Code Annotated 1953
- 3 **19-3-315**, Utah Code Annotated 1953
- 4 **19-3-316**, Utah Code Annotated 1953
- 5 **19-3-317**, Utah Code Annotated 1953

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

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

8 **19-3-301. Restrictions on nuclear waste placement in state.**

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

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

15 **19-3-302. Legislative intent.**

16 (1) The state of Utah enacts this part to regulate transportation, transfer, storage, decay in
17 storage, treatment, and disposal of any high level nuclear waste and greater than class C
18 radioactive waste in Utah, thereby asserting and protecting the state's interests in environmental
19 and economic resources consistent with 42 U.S.C.A. 2011 et seq., Atomic Energy Act and 42
20 U.S.C.A. 10101 et seq., Nuclear Waste Policy Act.

21 (2) Neither the Atomic Energy Act nor the Nuclear Waste Policy Act provides for siting
22 a large privately owned high level nuclear waste transfer, storage, decay in storage, or treatment
23 facility away from the vicinity of the reactors. The Atomic Energy Act and the Nuclear Waste
24 Policy Act specifically define authorized storage and disposal programs and activities. The state
25 of Utah in enacting this part is not preempted by federal law, since any proposed facilities that
26 would be sited in Utah are not contemplated or authorized by federal law and, in any circumstance,
27 this part is not contrary to or inconsistent with federal law or Congressional intent.

28 (3) The state of Utah has environmental and economic interests which do not involve
29 nuclear safety regulation, and which must be considered and complied with in siting a high level
30 nuclear waste or greater than Class C radioactive waste transfer, storage, decay in storage,
31 treatment, or disposal facility and in transporting these wastes in the state.

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

4 (5) The state recognizes the sovereign rights of Indian tribes within the state of Utah.
5 However, any proposed transfer, storage, decay in storage, treatment, or disposal facility located
6 on a reservation which directly affects and impacts state interests by creating off-reservation
7 effects such as potential or actual degradation of soils and groundwater, potential or actual
8 contamination of surface water, pollution of the ambient air, emergency planning costs, impacts
9 on development, agriculture, and ranching, and increased transportation activity, is subject to state
10 jurisdiction.

11 (6) There is no tradition of regulation by the Indian tribes in Utah of high level nuclear
12 waste or higher than class C radioactive waste. The state does have a long history of regulation
13 of radioactive sources and natural resources and in the transfer, storage, treatment, and
14 transportation of materials and wastes throughout the state. The state finds that its interests are
15 even greater when nonmembers of an Indian tribe propose to locate a facility on tribal trust lands
16 primarily to avoid state regulation and state authorities under federal law.

17 (7) (a) This part is not intended to modify existing state requirements for obtaining
18 environmental approvals, permits, and licenses, including surface and groundwater permits and
19 air quality permits, when the permits are necessary under state and federal law to construct and
20 operate a high level nuclear waste or greater than class C radioactive waste transfer, storage, decay
21 in storage, treatment, or disposal facility.

22 (b) Any source of air pollution proposed to be located within the state, including sources
23 located within the boundaries of an Indian reservation, which will potentially or actually have a
24 direct and significant impact on ambient air within the state, is required to obtain an approval order
25 and permit from the state under Section 19-2-108.

26 (c) Any facility which will potentially or actually have a significant impact on the state's
27 surface or groundwater resources is required to obtain a permit under Section 19-5-107 even if
28 located within the boundaries of an Indian reservation.

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

1 enormous economic and human injury.

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

3 **19-3-303. Definitions.**

4 As used in this part:

5 (1) "Greater than class C radioactive waste" means low-level radioactive waste that has
6 higher concentrations of specific radionuclides than allowed for class C waste.

7 (2) "High level nuclear waste" has the same meaning as in Section 19-3-102.

8 (3) "Rule" means a rule made by the department under Title 63, Chapter 46a, Utah
9 Administrative Rulemaking Act.

10 (4) "Storage facility" means any facility which stores, holds, or otherwise provides for the
11 emplacement of waste regardless of the intent to recover that waste for subsequent use, processing,
12 or disposal.

13 (5) "Transfer facility" means any facility which transfers waste from and between
14 transportation modes, vehicles, cars, or other units, and includes rail terminals and intermodal
15 transfer points.

16 (6) "Waste" or "wastes" means high level nuclear waste and greater than class C
17 radioactive waste.

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

19 **19-3-304. Licensing and approval by governor and Legislature -- Powers and duties**
20 **of the department.**

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

25 (b) The Department of Environmental Quality may issue the license, and the Legislature
26 and the governor may approve the license, only upon finding the requirements and standards of
27 this part have been met.

28 (2) The department shall by rule establish the procedures and forms required to submit an
29 application for a construction and operating license under this part.

30 (3) The department may make rules implementing this part as necessary for the protection
31 of the public health and the environment, including:

1 (a) rules for safe and proper construction, installation, repair, use, and operation of waste
2 transfer, storage, decay in storage, treatment, and disposal facilities;

3 (b) rules governing prevention of and responsibility for costs incurred regarding accidents
4 that may occur in conjunction with the operation of the facilities; and

5 (c) rules providing for disciplinary action against the license upon violation of any of the
6 licensure requirements under this part or rules made under this part.

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

8 **19-3-305. Application for license.**

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

11 (1) results of studies adequate to:

12 (a) identify the presence of any groundwater aquifers in the area of the proposed site;

13 (b) assess the quality of the groundwater of all aquifers identified in the area of the
14 proposed site;

15 (c) provide reports on the monitoring of vadose zone and other near surface groundwater;

16 (d) provide reports on hydraulic conductivity tests; and

17 (e) provide any other information necessary to estimate adequately the groundwater travel
18 distance;

19 (2) identification of transportation routes and transportation plans within the state and
20 demonstration of compliance with federal, state, and local transportation requirements;

21 (3) estimates of the composition, quantities, and concentrations of waste to be generated
22 by the activities covered by the license;

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

25 (5) detailed engineering plans and specifications for the construction and operation of the
26 facility and for the closure of the facility;

27 (6) detailed cost estimates and funding sources for construction, operation, and closure of
28 the facility;

29 (7) a security plan that includes a detailed description of security measures that would be
30 installed in and around the facility;

31 (8) a detailed description of site suitability, including a description of the geologic,

1 geochemical, geotechnical, hydrologic, ecologic, archaeologic, meteorologic, climatologic, and
2 biotic features of the site and vicinity;

3 (9) specific identification of:

4 (a) the applicant, the wastes to be accepted, the sources of waste, and the owners and
5 operators of the facility; and

6 (b) the persons or entities having legal responsibility for the facility and wastes;

7 (10) quantitative and qualitative environmental and health risk assessments for all
8 proposed activities, including transfer, storage, and transportation of wastes;

9 (11) technical qualifications, including training and experience of the applicant, staff, and
10 personnel who are to engage in the proposed activities;

11 (12) a quality assurance program, radiation safety program, and environmental monitoring
12 program;

13 (13) a regional emergency plan for an area surrounding the facility having at least a 75
14 mile radius, but which may be greater, if required by department rule; and

15 (14) any other information and monitoring the department determines necessary to insure
16 the protection of the public health and the environment.

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

18 **19-3-306. Information and findings for approval by the department.**

19 The department may not issue a construction and operating license unless information in
20 the application:

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

24 (2) establishes financial assurance for operation and closure of the facility and for
25 responding to emergency conditions in transportation and at the facility as required by department
26 rules, including proof the applicant:

27 (a) possesses substantial resources that are sufficient to respond to any reasonably
28 foreseeable injury or loss resulting from operation of the facility; and

29 (b) will maintain these resources throughout the term of the facility;

30 (3) provides evidence the wastes will not cause or contribute to an increase in mortality,
31 an increase in illness, or pose a present or potential hazard to human health or the environment;

1 (4) provides evidence the personnel employed at the facility have appropriate and
2 sufficient education and training for the safe and adequate handling of the wastes;

3 (5) demonstrates the public benefits of the proposed facility, including the lack of other
4 available sites or methods for the management of the waste that would be less detrimental to the
5 public health or safety or to the quality of the environment;

6 (6) demonstrates the technical feasibility of the proposed waste management technology;

7 (7) demonstrates conformance with federal laws, regulations, and guidelines for a waste
8 facility;

9 (8) demonstrates conclusively that any facility is temporary and provides identified plans
10 and alternatives for closure of the facility with an enforceable schedule and identified dates for
11 closure, including evidence that:

12 (a) an identified party has irrevocably agreed to accept the waste at the end of the
13 temporary storage period; and

14 (b) the waste will be moved to another facility;

15 (9) demonstrates that:

16 (a) the applicant is not a limited liability company, limited partnership, or other entity with
17 limited liability; and

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

22 (10) provides evidence the applicant has posted a cash bond in the amount of at least two
23 billion dollars or in a greater amount as determined by department rule to be necessary to
24 adequately respond to any reasonably foreseeable releases or losses, or the closure of the facility;

25 (11) provides evidence the applicant and its officers and directors, the owners or entities
26 responsible for the generation of the waste, principals, and any other entities participating in or
27 associated with the applicant, including landowners, lessors, and contractors, consent in writing
28 to the jurisdiction of the state courts of Utah for any claims, damages, private rights of action, state
29 enforcement actions, or other proceedings relating to the construction, operation, and compliance
30 of the proposed facility; and

31 (12) demonstrates that any person or entity which sends wastes to a facility shall remain

1 the owner of and responsible for the waste and its ultimate disposal and is willing to accept
2 unlimited, strict liability, consistent with federal law, for any financial or human losses, liabilities,
3 or injuries resulting from the wastes for the entire time period the waste is at the facility.

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

5 **19-3-307. Siting criteria.**

6 (1) The department may not issue a construction and operating license to any waste
7 transfer, storage, decay in storage, treatment, or disposal facility unless the facility location meets
8 the siting criteria under Subsection (2).

9 (2) The facility may not be located:

10 (a) within or underlain by:

11 (i) national, state, or county parks; monuments or recreation areas; designated wilderness
12 or wilderness study areas; or wild and scenic river areas;

13 (ii) ecologically or scientifically significant natural areas, including wildlife management
14 areas and habitats for listed or proposed endangered species as designated by federal law;

15 (iii) 100-year flood plains;

16 (iv) areas 200 feet from Holocene faults;

17 (v) underground mines, salt domes, or salt beds;

18 (vi) dam failure flood areas;

19 (vii) areas subject to landslide, mud flow, or other earth movement, unless adverse impacts
20 can be mitigated;

21 (viii) farmlands classified or evaluated as "prime," "unique," or of "statewide importance"
22 by the U.S. Department of Agricultural Soil Conservation Service under the Prime Farmland
23 Protection Act;

24 (ix) areas within five miles of existing permanent dwellings, residential areas, or other
25 habitable structures, including schools, churches, or historic structures;

26 (x) areas within five miles of surface waters, including intermittent streams, perennial
27 streams, rivers, lakes, reservoirs, and wetlands;

28 (xi) areas within 1,000 feet of archeological sites regarding which adverse impacts cannot
29 reasonably be mitigated;

30 (xii) recharge zones of aquifers containing groundwater which has a total dissolved solids
31 content of less than 10,000 mg/l; or

- 1 (xiii) drinking water source protection areas:
- 2 (b) in areas:
- 3 (i) above or underlain by aquifers that:
- 4 (A) contain groundwater which has a total dissolved solids content of less than 500 mg/l;
- 5 and
- 6 (B) do not exceed state groundwater standards for pollutants;
- 7 (ii) above or underlain by aquifers containing groundwater which has a total dissolved
- 8 solids content between 3,000 and 10,000 mg/l, when the distance from the surface to the
- 9 groundwater is less than 100 feet;
- 10 (iii) of extensive withdrawal of water, gas, or oil;
- 11 (iv) above or underlain by weak and unstable soils, including soils that lose their ability
- 12 to support foundations as a result of hydrocompaction, expansion, or shrinkage;
- 13 (v) above or underlain by karst terrains; or
- 14 (vi) where air space use and ground transportation routes present incompatible risks and
- 15 uses; or
- 16 (c) within a distance to existing drinking water wells and watersheds for public water
- 17 supplies of five years groundwater travel time plus 1,000 feet.
- 18 (3) An applicant for a license may request from the department an exemption from any of
- 19 the siting criteria stated in this section upon demonstration that the modification would be
- 20 protective of and have no adverse impacts on the public health and the environment.

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

22 **19-3-308. Application fee and annual fees.**

23 (1) (a) Any application for a waste transfer, storage, decay in storage, treatment, or

24 disposal facility shall be accompanied by an initial fee of \$5,000,000.

25 (b) The applicant shall subsequently pay an additional fee to cover the costs to the state

26 associated with review of the application, including costs to the state and the state's contractors for

27 permitting, technical, administrative, legal, safety, and emergency response reviews, planning,

28 training, infrastructure, and other impact analyses, studies, and services required to evaluate a

29 proposed facility.

30 (2) For the purpose of funding the state oversight and inspection of any waste transfer,

31 storage, decay in storage, treatment, or disposal facility, and to establish state infrastructure,

1 including, but not limited to providing for state Department of Environmental Quality, state
2 Department of Transportation, state Department of Public Safety, and other state agencies'
3 technical, administrative, legal, infrastructure, maintenance, training, safety, socio-economic, law
4 enforcement, and emergency resources necessary to respond to these facilities, the owner or
5 operator shall pay to the state a fee as established by department rule under Section 63-38-3.2, to
6 be assessed:

7 (a) per ton of storage cask and high level nuclear waste per year for storage, decay in
8 storage, treatment, or disposal of high level nuclear waste;

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

11 (c) per ton of storage cask and greater than class C radioactive waste for the storage, decay
12 in storage, treatment, or disposal of greater than class C radioactive waste; and

13 (d) per ton of transportation cask and greater than class C radioactive waste for each
14 transfer of greater than class C radioactive waste.

15 (3) Funds collected under Subsection (2) shall be placed in the Nuclear Waste Facility
16 Oversight Restricted Account, created in Section 19-3-309.

17 (4) The owner or operator of the facility shall pay the fees imposed under this section to
18 the department on or before the 15th day of the month following the month in which the fee
19 accrued.

20 (5) Annual fees due under this part accrue on July 1 of each year and shall be paid to the
21 department by July 15 of that year.

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

23 **19-3-309. Restricted account.**

24 (1) There is created within the General Fund a restricted account known as the "Nuclear
25 Waste Facility Oversight Account."

26 (2) (a) The account shall be funded from the fees imposed under this part.

27 (b) The department shall deposit all fees collected under this part in the account.

28 (c) The funds in the account shall be used to carry out the department's duties under this
29 part.

30 (d) The account shall earn interest, which shall be deposited in the account.

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

1 **19-3-310. Benefits agreement.**

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

6 (2) (a) The benefits agreement shall be attached to and made part of the terms of any
7 license for the facility.

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

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

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

14 **19-3-311. Length of license.**

15 (1) Any construction and operating license shall be issued for a term established by
16 department rule, but the term may not be longer than 20 years.

17 (2) The term of the license may be extended beyond 20 years only by approval of the
18 department, the Legislature, and the governor.

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

20 **19-3-312. Enforcement -- Penalties.**

21 (1) When the department or the governor has probable cause to believe a person is
22 violating or is about to violate any provision of this part, the department or the governor shall
23 direct the state attorney general to apply to the appropriate court for an order enjoining the person
24 from engaging in or continuing to engage in the activity.

25 (2) In addition to being subject to injunctive relief, any person who violates any provision
26 of this part is subject to a civil penalty of up to \$10,000 per day for each violation.

27 (3) Any person who knowingly violates a provision of this part is guilty of a class A
28 misdemeanor and subject to a fine of up to \$10,000 per day.

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

30 **19-3-313. Reciprocity.**

31 Waste may not be transported into and transferred, stored, decayed in storage, treated, or

1 disposed of in the state if the state of origin of the waste or the state in which the waste was
2 generated prohibits or limits similar actions within its own boundaries.

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

4 **19-3-314. Local jurisdiction.**

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

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

8 **19-3-315. Transportation requirements.**

9 (1) A person may not transport wastes in the state, including on highways, roads, rail, by
10 air, or otherwise, without:

11 (a) having received approval from the state Department of Transportation; and

12 (b) having demonstrated compliance with rules of the state Department of Transportation.

13 (2) The Department of Transportation may:

14 (a) make rules requiring a transport and route approval permit, weight restrictions, tracking
15 systems, and state escort; and

16 (b) assess appropriate fees as established under Section 63-38-3.2 for each shipment of
17 waste, consistent with the requirements and limitations of federal law.

18 (3) The Department of Environmental Quality shall establish any other transportation rules
19 as necessary to protect the public health, safety, and environment.

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

21 **19-3-316. Cost recovery.**

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

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

26 **19-3-317. Severability.**

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

Legislative Review Note
as of 2-12-98 3:48 PM

A limited legal review of this bill raises no obvious constitutional or statutory concerns.

Office of Legislative Research and General Counsel