

1 a variety of approvals, permits, or permit modifications, including a modification to the dangerous waste
 2 portion of the Hanford RCRA permit. The ILAW disposal facility would be subject to the landfill design
 3 requirements as specified in “Standards for Owners and Operators of Hazardous Waste Treatment,
 4 Storage, and Disposal Facilities” (40 CFR 264, Subpart N), and WAC 173-303-665. The primary design
 5 features mandated by these regulations are the leachate collection system and the trench liner system
 6 (double liners, primary, and secondary).

7
 8 The list of permits and approvals that may be required to implement the ILAW disposal alternatives is
 9 provided in Table 6.2. In some cases, specific operating requirements or pollution control equipment
 10 would be required to ensure compliance with air and water quality regulations.

11 **Table 6.2.** Potential Permits and Approvals Needed for ILAW Storage and Disposal
 12
 13

Activity and Waste Type	Regulatory Action Required	Regulation or Directive	Regulatory Agency
Air emissions	Controls for new sources of toxic and hazardous air pollutants (approval)	WAC 173-460, 40 CFR 61	Ecology and EPA
Air emissions	Notice of Construction (approval), licensing, and possible site-wide air operating permit modification (permit)	WAC 173-400, WAC 246-247	Washington State Department of Health and Ecology
Dangerous (including mixed) waste generation, storage, treatment, and disposal	Dangerous waste permit, RCRA permit (permit)	WAC 173-303, 40 CFR 260-280	Ecology EPA
Radiological	Disposal authorization statement	DOE M 435.1-1	DOE

14
 15 **6.20 References**
 16

17 10 CFR 71. “Packaging and Shipping of Radioactive Materials.” U.S. Code of Federal Regulations.
 18 Online at: http://www.access.gpo.gov/nara/cfr/waisidx_01/10cfr71_01.html.

19
 20 10 CFR 830. “Nuclear Safety Management.” U.S. Code of Federal Regulations. Online at:
 21 http://www.access.gpo.gov/nara/cfr/waisidx_02/10cfr830_02.html.

22
 23 10 CFR 835. “Occupational Radiation Protection.” U.S. Code of Federal Regulations. Online at:
 24 http://www.access.gpo.gov/nara/cfr/waisidx_02/10cfr835_02.html.

25
 26 10 CFR 1021. “DOE National Environmental Policy Act Implementing Procedures.” U.S. Code of
 27 Federal Regulations. Online at: http://www.access.gpo.gov/nara/cfr/waisidx_02/10cfr1021_02.html.

1 29 CFR 1910. "Occupational Safety and Health Standards." U.S. Code of Federal Regulations. Online
2 at: http://www.access.gpo.gov/nara/cfr/waisidx_01/29cfr1910_01.html.
3
4 29 CFR 1960. "Basic Elements for Federal Employee Occupational Safety and Health Programs and
5 Related Matters." U.S. Code of Federal Regulations. Online at:
6 http://www.access.gpo.gov/nara/cfr/waisidx_01/29cfr1960_01.html.
7
8 40 CFR 50-99. "Clean Air Act/Air Programs." U.S. Code of Federal Regulations. Online at:
9 <http://www.access.gpo.gov/cgi-in/cfrassemble.cgi?title=200240>.
10
11 40 CFR 52. "Approval and Promulgation of Implementation Plans." U.S. Code of Federal Regulations.
12 Online at: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfrv3_02.html.
13
14 40 CFR 61. "National Emission Standards for Hazardous Air Pollutants." U.S. Code of Federal
15 Regulations. Online at: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr61_02.html.
16
17 40 CFR 63. "National Emissions Standards for Hazardous Air Pollutants for Source Categories." U.S.
18 Code of Federal Regulations. Online at:
19 http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfrv9_02.html.
20
21 40 CFR 81. "Designation of Areas for Air Quality Planning Purposes." U.S. Code of Federal
22 Regulations. Online at: http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr81_01.html.
23
24 40 CFR 93. "Determining Conformity of Federal Actions to State and Federal Implementation Plans."
25 U.S. Code of Federal Regulations. Online at:
26 http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr93_01.html.
27
28 40 CFR 141. "National Primary Drinking Water Regulations." U.S. Code of Federal Regulations.
29 Online at: http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr141_01.html.
30
31 40 CFR 191. "Environmental Radiation Protection Standards for Management and Disposal of Spent
32 Nuclear Fuel, High-level and Transuranic Radioactive Wastes." U.S. Code of Federal Regulations.
33 Online at: http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr191_01.html.
34
35 40 CFR 260-282. "Federal Regulations for Implementing the Resource Conservation and Recovery Act."
36 U.S. Code of Federal Regulations. Online at:
37 <http://www.access.gpo.gov/cgi-bin/cfrassemble.cgi?title=200140>.
38
39 40 CFR 300. "National Oil and Hazardous Substances Pollution Contingency Plan." U.S. Code of
40 Federal Regulations. Online at: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr300_02.html.
41
42 40 CFR 761. "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce,
43 and Use Prohibitions." U.S. Code of Federal Regulations. Online at:
44 http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfr761_01.html.

1 40 CFR 1500-1508. "Council on Environmental Quality Regulations for Implementing the Procedural
2 Provision of the National Environmental Policy Act." U.S. Code of Federal Regulations. Online at:
3 http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfrv28_01.html.
4

5 49 CFR 106-180. "Subtitle B--Other Regulations Relating to Transportation. Chapter I. Research and
6 Special Programs Administration." U.S. Code of Federal Regulations. Online at:
7 http://www.access.gpo.gov/nara/cfr/waisidx_01/49cfr173_01.html.
8

9 49 CFR 397. "Transportation of Hazardous Materials; Driving and Parking Rules." U.S. Code of Federal
10 Regulations. Online at: <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1>.
11

12 59 FR 55322. "Washington: Final Authorization of State Hazardous Waste Management Program
13 Revisions." *Federal Register* (November 4, 1994).
14

15 59 FR 7629. "Executive Order 12898 of February 11, 1994: Federal Actions to Address Environmental
16 Justice in Minority Populations and Low-Income Populations." *Federal Register* (February 16, 1994).
17

18 61 FR 26771. "Executive Order 13007 of May 24, 1996: Indian Sacred Sites." *Federal Register* (May
19 29, 1996).
20

21 62 FR 19885. "Executive Order 13045 of April 21, 1997: Protection of Children from Environmental
22 Health Risks and Safety Risks." *Federal Register* (April 23, 1997).
23

24 64 FR 61615. "Record of Decision: Hanford Comprehensive Land-Use Plan Environmental Impact
25 Statement (HCP EIS)." *Federal Register* (November 12, 1999).
26

27 65 FR 14595. "Executive Order 13148 of April 21, 2000: Greening the Government Through
28 Leadership in Environmental Management." *Federal Register* (April 26, 2000).
29

30 65 FR 37253. "Establishment of the Hanford Reach National Monument." Proclamation 7319 of
31 June 9, 2000 by the President of the United States of America. *Federal Register* (June 9, 2000).
32

33 65 FR 76708. "National Primary Drinking Water Regulations; Radionuclides; Final Rule." *Federal*
34 *Register* (December 7, 2000).
35

36 67 FR 40333. "Notice of Intent to Prepare a Comprehensive Conservation Plan and Associated
37 Environmental Impact Statement for Hanford Reach National Monument/Saddle Mountain National
38 Wildlife Refuge." *Federal Register* (June 12, 2002).
39

40 67 FR 46328. "Indian Entities Recognized and Eligible to Receive Services from the United States
41 Bureau of Indian Affairs." *Federal Register* (July 12, 2002).
42

43 15 USC 2601, et seq., Toxic Substances Control Act (TSCA). Online at: <http://www4.law.cornell.edu>.
44

1 16 USC 470, et seq., National Historic Preservation Act (NHPA) of 1966. Online at:
2 <http://www4.law.cornell.edu>.
3
4 16 USC 661, Fish and Wildlife Coordination Act. Online at: <http://www4.law.cornell.edu>.
5
6 16 USC 668, et seq., Bald and Golden Eagles. Online at: <http://www4.law.cornell.edu>.
7
8 16 USC 703, Migratory Bird Treaty Act. Online at: <http://www4.law.cornell.edu>.
9
10 16 USC 1531, Endangered Species Act. Online at: <http://www4.law.cornell.edu>.
11
12 16 USC 1536, Endangered Species Act of 1973. Online at: <http://www4.law.cornell.edu>.
13
14 25 USC 3001, et seq., Native American Graves Protection and Repatriation Act. Online at:
15 <http://www4.law.cornell.edu>.
16
17 29 USC 653, 739, 760, Occupational Safety and Health Act of 1970. Online at:
18 <http://www4.law.cornell.edu>.
19
20 33 USC 1251, Clean Water Act. Online at: <http://www4.law.cornell.edu>.
21
22 42 USC 300, Safe Drinking Water Act. Online at: <http://www4.law.cornell.edu>.
23
24 42 USC 1996, American Indian Religious Freedom Act. Online at: <http://www4.law.cornell.edu>.
25
26 42 USC 2011, et seq., Atomic Energy Act (AEA) of 1954. Online at: <http://www4.law.cornell.edu>.
27
28 42 USC 4321, et seq., National Environmental Policy Act (NEPA) of 1969. Online at:
29 <http://www4.law.cornell.edu>.
30
31 42 USC 6901, et seq., Resource Conservation and Recovery Act (RCRA) of 1976. Online at:
32 <http://www4.law.cornell.edu>.
33
34 42 USC 7401, et seq., Clean Air Act. Online at: <http://www4.law.cornell.edu>.
35
36 42 USC 9601, et seq., Comprehensive Environmental Response, Compensation, and Liability Act
37 (CERCLA) of 1980. Online at: <http://www4.law.cornell.edu>.
38
39 42 USC 11001, et seq., Emergency Planning and Community Right-To-Know Act. Online at:
40 <http://www4.law.cornell.edu>.
41
42 42 USC 13101, et seq., Pollution Prevention Act. Online at: <http://www4.law.cornell.edu>.
43

1 49 USC 5101, et seq., Hazardous Materials Transportation Act. Online at:
2 http://www.access.gpo.gov/su_docs/multidb.html.
3
4 CEQ. 1997. *Environmental Justice: Guidance Under the National Environmental Policy Act*. Council
5 on Environmental Quality. Executive Office of the President, Washington, D.C. Online at:
6 <http://ceq.eh.doe.gov>.
7
8 Clinton, W. J. 2000. “Memorandum from President William Clinton to the Secretary of Energy.”
9 June 9, 2000. Online at: <http://clinton6.nara.gov>.
10
11 DOE. 1993a. *Environmental, Safety, and Health Protection Standards*. DOE Order 5480.4,
12 U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
13
14 DOE. 1993b. *Radiation Protection of the Public and the Environment*. DOE Order 5400.5,
15 U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
16
17 DOE. 1995. *Departmental Materials Transportation and Packaging Management*. DOE Order 460.2,
18 U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
19
20 DOE. 1996a. *DOE Radiological Health and Safety Policy*. DOE Policy 441.1, U.S. Department of
21 Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
22
23 DOE. 1996b. *Packaging and Transportation Safety*. DOE Order 460.1A, U.S. Department of Energy,
24 Washington, D.C. Online at: <http://www.directives.doe.gov>.
25
26 DOE. 1996c. *Safety Management System Policy*. DOE Policy 450.4, U.S. Department of Energy,
27 Washington, D.C. Online at: <http://www.directives.doe.gov>.
28
29 DOE. 1997. “Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and
30 Low-Income Populations.” Environmental Justice Information Brief, EH-411-97/0001, U.S. Department
31 of Energy, Washington, D.C. Online at: <http://homer.ornl.gov>.
32
33 DOE. 1998. *Worker Protection Management for DOE Federal and Contractor Employees*. DOE
34 Order 440.1A, U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
35
36 DOE. 1999. *Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement and*
37 *Comprehensive Land-Use Plan*. DOE/EIS-0222F. U.S. Department of Energy, Washington, D.C.
38
39 DOE. 2000. *U.S. Department of Energy American Indian and Alaska Native Tribal Government Policy*.
40 U.S. Department of Energy, Washington, D.C. Online at: <http://www.ci.doe.gov>.
41
42 DOE. 2001a. *Department of Energy Management of Cultural Resources*. DOE Policy 141.1.
43 U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
44

1 DOE. 2001b.. *Management of Cultural Resources at Department of Energy Facilities*.
2 DOE/EH-412/0005r (revised July 2001). U.S. Department of Energy, Washington, D.C. Online at:
3 <http://homer.ornl.gov>.
4
5 DOE. 2001c. *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear*
6 *Facilities*. DOE Order 5480.20A, U.S. Department of Energy, Washington, D.C. Online at:
7 <http://www.directives.doe.gov>.
8
9 DOE. 2001d. *Radioactive Waste Management*. DOE Order 435.1 Change 1, U.S. Department of
10 Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
11
12 DOE. 2001e. *Radioactive Waste Management Manual*. DOE Manual 435.1-1, U.S. Department of
13 Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
14
15 DOE. 2001f. *Toxic Substances Control Act Polychlorinated Biphenyls Hanford Site Users Guide*.
16 DOE/RL-2001-50, U.S. Department of Energy, Richland, Washington.
17
18 DOE. 2002a. *Annual Hanford Site Environmental Permitting Status Report*. DOE/RL-96-63, Rev. 6,
19 U.S. Department of Energy, Richland, Washington.
20
21 DOE. 2002b. “DOE Standard: A Graded Approach for Evaluating Radiation Doses to Aquatic and
22 Terrestrial Biota.” DOE-STD-1153-2002. U.S. Department of Energy, Washington, D.C. Online at:
23 <http://tis.eh.doe.gov/techstds/>.
24
25 DOE. 2002c. *Facility Safety*. DOE Order 420.1A, U.S. Department of Energy, Washington, D.C.
26 Online at: <http://www.directives.doe.gov>.
27
28 DOE. 2002d. *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent*
29 *Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada*.
30 DOE/EIS-0250F. U.S. Department of Energy, Washington, D.C.
31
32 DOE. 2002e. *Radioactive Material Transportation Practices Manual*. DOE Manual 460.2-1.
33 U.S. Department of Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
34
35 DOE. 2003a. *Environmental Protection Program*. DOE Order 450.1, U.S. Department of Energy,
36 Washington, D.C. Online at: <http://www.directives.doe.gov>.
37
38 DOE. 2003b. *Startup and Restart of Nuclear Facilities*. DOE Order 425.1C, U.S. Department of
39 Energy, Washington, D.C. Online at: <http://www.directives.doe.gov>.
40
41 Ecology, EPA, and DOE. 1989. *Hanford Federal Facility Agreement and Consent Order*. 89-10, Rev. 5
42 (as amended through December 31, 1998). Washington State Department of Ecology,
43 U.S. Environmental Protection Agency, U.S. Department of Energy, Richland, Washington. Online at:
44 <http://www.hanford.gov>.

1 Ecology. 2001a. *Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for*
2 *the Treatment, Storage, and Disposal of Dangerous Waste, Revision 7*. Washington State Department of
3 Ecology Publication Number 94-05-001. Permit Number: WA7890008967. Olympia, Washington.
4 Online at: <http://www.ecy.wa.gov>.
5
6 Ecology. 2001b. *Hanford Air Operating Permit*. Washington State Department of Ecology Publication
7 Number 00-05-006. Olympia, Washington. Online at: <http://www.ecy.wa.gov>.
8
9 EPA. 1994. "Hazardous and Solid Waste Amendments Portion of the Resource Conservation and
10 Recovery Act Permit for the Treatment, Storage, and Disposal of Hazardous Waste". September 1994.
11 U.S. Environmental Protection Agency, Region 10, Seattle, Washington. Online at:
12 <http://yosemite.epa.gov>.
13
14 EPA. 2000. "Framework Agreement for Management of Polychlorinated Biphenyls (PCBs) in Hanford
15 Tank Waste." U.S. Environmental Protection Agency. August 31, 2000. Online at:
16 <http://yosemite.epa.gov/R10/OWCM.NSF/72b5220edcd9cf5b88256500005decf3/ce50d3fe12e371f48825>
17 [6a00006ffa0f?OpenDocument](http://yosemite.epa.gov/R10/OWCM.NSF/72b5220edcd9cf5b88256500005decf3/ce50d3fe12e371f488256a00006ffa0f?OpenDocument).
18
19 Hanford Reach Act. 1988. Public Law No. 100-605 as amended by Public Law 104-333. Online at:
20 http://206.61.210.104/pl/iap/html/body_apx-a.htm.
21
22 Poston, T. M., R. W. Hanf, R. L. Dirkes, and L. F. Morasch. 2002. *Hanford Site Environmental Report*
23 *for Calendar Year 2001*. PNNL-13910, Pacific Northwest National Laboratory, Richland, Washington.
24 Online at: <http://www.hanford.gov>.
25
26 Treaty with the Walla Walla, Cayuse and Umatilla. 1855. June 9, 1855, 12 Stat. 945.
27
28 Treaty with the Yakama. 1855. June 9, 1855, 12 Stat. 951.
29
30 Treaty with the Nez Perces. 1855. June 11, 1855, 12 Stat. 957.
31
32 WAC 173-216. "State Waste Discharge Permit Program." Washington Administrative Code, Olympia,
33 Washington. Online at: <http://www.leg.wa.gov>.
34
35 WAC 173-303. "Dangerous Waste Regulations." Washington Administrative Code. Olympia,
36 Washington. Online at: <http://www.leg.wa.gov>.
37
38 WAC 173-400. "General Regulations for Air Pollution Sources." Washington Administrative Code.
39 Olympia, Washington. Online at: <http://www.leg.wa.gov>.
40
41 WAC 173-460. "Controls for New Sources of Toxic Air Pollutants." Washington Administrative Code.
42 Olympia, Washington. Online at: <http://www.leg.wa.gov>.
43

- 1 WAC 173-480. “Ambient Air Quality Standards and Emission Limits for Radionuclides.” Washington
2 Administrative Code. Olympia, Washington. Online at: <http://www.leg.wa.gov>.
3
4 WAC 246-247. “Radiation Protection – Air Emissions.” Washington Administrative Code. Olympia,
5 Washington. Online at: <http://www.leg.wa.gov>.
6
7 Washington State Clean Air Act. RCW 70.94.
8
9 Washington State Hazardous Waste Management Act. RCW 70.105.
10