

1 **IDAHO NATIONAL ENGINEERING and**
2 **ENVIRONMENTAL LABORATORY**
3 **SITE TREATMENT PLAN**

4
5
6 **1. PURPOSE AND SCOPE**

7
8 **1.1 History**

9
10 The United States Department of Energy (DOE) is required to prepare a plan for developing
11 treatment capacities and technologies for each facility at which DOE generates or stores mixed waste,
12 pursuant to Section 3021(b) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C.
13 6939c(b), as amended by Section 105(b) of the Federal Facility Compliance Act, Pub. L. 102-386 (1992)
14 (FFC Act). Upon submission of the Idaho National Engineering Laboratory (INEEL) plan to the
15 appropriate regulatory agency, the Idaho Department of Health and Welfare (IDHW), Division of
16 Environmental Quality (DEQ), the FFC Act requires the DEQ to solicit and consider public comments,
17 and approve, approve with modification, or disapprove the plan within six months. The regulatory
18 agency is to consult with the U.S. Environmental Protection Agency (EPA) and any state in which a
19 facility affected by the plan is located. Upon approval of a plan, the regulatory agency must issue an
20 order requiring compliance with the approved plan.

21
22 **1.2 Description of Plan**

23
24 DOE has prepared this Site Treatment Plan (STP) for mixed waste at INEEL, which identifies
25 how DOE proposes to treat INEEL's mixed waste with existing technologies or develop technologies
26 where technologies do not exist or need modification.

1.3 Purposes

The purposes of this STP include:

1.3.1 Fulfilling the requirements of the FFC Act

1.3.2 Establishing an enforceable framework in conjunction with the Consent Order in which DOE will develop treatment capacities and technologies and treat or otherwise meet RCRA land disposal restrictions (LDRs) for all covered LDR mixed wastes currently in storage and to be generated or received in the future

1.3.3 Allowing for storage of current and projected covered LDR mixed wastes at the INEEL during the implementation and term of this STP and Consent Order.

1.4 Statutory and Regulatory Requirements

1.4.1 This STP is the statutorily required document described in the FFC Act Section 105(b) as a "plan for developing treatment capacities and technologies" to treat the mixed waste at INEEL pursuant to EPA standards promulgated pursuant to Section 3004(m) of RCRA. This STP is also discussed by DOE in the Publication Schedule for Submitting Plans for Treating Mixed Waste Generated or Stored at Each Site as Required by the Federal Facility Compliance Act of 1992, 58 Federal Register 17875 (April 6, 1993).

This STP provides overall schedules with milestones and planning dates for achieving compliance with LDR, a general framework for establishment and review of milestones and planning dates and the conversion of planning dates into milestones, and other provisions for implementing the DEQ approved STP enforced under the Consent Order.

1.4.2 This STP and Consent Order fulfill the requirements contained in the FFC Act, RCRA Section 3021 and the Idaho Hazardous Waste Management Act (HWMA). Storage of covered waste at INEEL, pending the development of treatment capacities and technologies and completion of LDR requirements pursuant to the STP, shall be considered in compliance with this STP, Consent Order, and applicable RCRA and HWMA requirements.

1.5 Definitions

INEEL Site Treatment Plan

1
2 Except as provided below or otherwise explicitly stated herein, the terms used in the STP shall
3 have the same meaning as used in the HWMA, IDAPA 16.01.05.000 et seq., RCRA, and the EPA Rules
4 and Regulations, 40 C.F.R. Parts 124, 260 through 268, and 270.

5
6 **Atomic Energy Act or AEA:** The Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 et
7 seq.

8
9 **Authorized Representative:** Any person including a contractor or subcontractor who is
10 specifically designated by a Party to act on behalf of that Party in any capacity, including an advisory
11 capacity.

12
13 **Consent Order or Order:** The document to which this approved STP is appended.

14
15 **Covered Waste:** Mixed waste covered by the STP, as described in Subsection 2.1 of the STP.
16 The term includes new mixed waste streams included pursuant to the notice provision of Subsection 2.4
17 of the STP, entitled "Inclusion of New Mixed Waste Streams." The term does not include mixed waste
18 excluded from coverage by Subsections 2.4.4 or 2.8.7 of the STP.

19
20 **Days:** Calendar days, unless otherwise specified. Any submittal under the terms of the STP that
21 would be due on a Saturday, Sunday, or a state or federal holiday shall be due the following business day.

22
23 **Deliverable:** Any written document that is to be placed into a method of delivery (e.g., in the
24 U.S. Mail) in satisfaction of milestones or other requirements under this STP or the Consent Order.

25
26 **Department or IDHW:** The State of Idaho Department of Health and Welfare, successor
27 agencies, employees, and authorized representatives.

28
29 **Division of Environmental Quality or DEQ:** The Idaho Department of Health and Welfare,
30 Division of Environmental Quality, successor agencies, employees, and authorized representatives.

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1 **DOE:** The United States Department of Energy, including headquarters (DOE-HQ), the Idaho
2 Operations Office (DOE-ID), the Argonne Group - West (ARG-W) of the Chicago Operations Office
3 (DOE-CH), the Idaho Branch Office - Naval Reactors (IBO), and any of DOE's contractors and
4 subcontractors at any tier, successor agencies, employees, and authorized representatives.
5

6 **EPA:** The United States Environmental Protection Agency, including Region 10, and any of its
7 successor agencies, employees, and authorized representatives.
8

9 **Fiscal Year or FY:** October 1 of one calendar year through September 30 of the following
10 calendar year. For example, Fiscal Year (FY) 1994 encompasses October 1, 1993, through September 30,
11 1994.
12

13 **High-Level Waste or HLW:** The term high-level waste or HLW shall have the meaning as set
14 for high-level radioactive waste in DOE Order 5820.2A or any successor DOE orders or amendments.
15 Under current DOE Order 5820.2A, HLW is waste material that results from the reprocessing of spent
16 nuclear fuels, including the liquid waste produced directly in the reprocessing, and any solid waste
17 derived from the liquid that contains a combination of transuranic waste and fission products at
18 concentrations requiring permanent isolation.
19

20 **HWMA:** The Idaho Hazardous Waste Management Act of 1983, as amended, Idaho Code §§
21 39-4401 to 4432 and its implementing rules in IDAPA 16.01.05.000 to .05.999.
22

23 **INEEL:** The Idaho National Engineering Laboratory, including facilities and installations in or
24 near Idaho Falls, Idaho and at the Site.
25

26 **INEEL Site or Site:** The site described in 54 Federal Register 48184 (November 21, 1989).
27

28 **Land Disposal Restrictions or LDR:** The limitations on land disposal and storage of waste set
29 forth in IDAPA §§ 16.01.05.011 (RCRA, 42 U.S.C. § 6924; 40 C.F.R. Part 268).
30

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1 **LDR Mixed Waste:** Mixed waste that is restricted from one or more methods of land disposal or
2 storage under IDAPA § 16.01.05.011 (RCRA, 42 U.S.C. § 6924; 40 C.F.R. Part 268).

3
4 **LDR Requirement or Standard:** The level(s) or method(s) of treatment or management
5 specified in IDAPA § 16.01.05.011 (40 C.F.R. Part 268) for a waste subject to the land disposal or
6 storage restriction under Section 3004 of RCRA (42 U.S.C. 6924).

7
8 **LDR Waste:** Waste subject to the requirements of the land disposal and storage restrictions of
9 IDAPA § 16.01.05.011 (40 C.F.R. Part 268).

10
11 **Milestone:** Fixed, firm, and enforceable date as set forth in this STP and Consent Order.

12
13 **Mixed Waste:** Waste that contains both hazardous waste and source, special nuclear, or by-
14 product material subject to the Atomic Energy Act of 1954. 42 U.S.C. § 2011 et seq.; RCRA, 42 U.S.C. §
15 6903(41).

16
17 **Mixed Low Level Waste or MLLW:** The term mixed low-level waste or MLLW shall mean
18 waste that contains both low-level radioactive waste or LLW (source, special nuclear or by-product
19 material subject to the Atomic Energy Act of 1954, 42 U.S.C. § 2011 et seq.) and hazardous waste. The
20 low-level radioactive waste component of the MLLW shall have the same meaning as given to "low-level
21 waste" in DOE Order 5820.2A (i.e., currently defined in the order as "Waste that contains radioactivity
22 and is not classified as high-level waste, transuranic waste, or spent nuclear fuel or 11e(2) by-product
23 material as defined by this Order. Test specimens of fissionable material irradiated for research and
24 development only, and not for the production of power or plutonium, may be classified as low-level
25 waste, provided the concentration of transuranic is less than 100 nCi/g.") or any successor DOE orders or
26 amendments.

27
28 **New mixed waste stream:** Mixed waste generated onsite from a new or unique activity or
29 generated offsite not previously identified by an identification number and name in Section 4, Covered
30 Waste, of the STP.

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1 **NEPA:** The National Environmental Policy Act, 42 U.S.C. § 4321 et seq., the Council on
2 Environmental Quality regulations implementing NEPA (40 C.F.R. parts 1500 - 1508), and the U.S.
3 Department of Energy's rules and regulations implementing that statute, (10 C.F.R. Part 1021).

4
5 **Offsite:** Any facility or installation other than **INEEL**.

6
7 **Onsite:** The **INEEL**, as that term is defined in this definition section.

8
9 **Planning Date:** The anticipated completion date of tasks which have not been designated as
10 milestones and which refer to events occurring beyond the DOE three year budget cycle planning period.
11 Planning dates are not requirements and are not enforceable.

12
13 **Project Manager:** Any official designated pursuant to Section 2.10, "Project Manager," of the
14 STP, to coordinate, monitor, or determine actions required by the STP or Consent Order.

15
16 **Radionuclide Separation:** For the purposes of the STP, the term "radionuclide separation" shall
17 mean the segregation of the radioactive portion of the mixed waste from the hazardous portion of the
18 mixed waste and may include storage (not RCRA treatment) of mixed waste for the purposes of allowing
19 for radioactive decay of the radioactive portion of the mixed waste to facilitate proper recovery,
20 treatment, or disposal in compliance with RCRA Section 3004(j).

21
22 **RCRA:** The Resource Conservation and Recovery Act (the Solid Waste Disposal Act), 42
23 U.S.C. § 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984, Pub. L. No.
24 98-616, 98 Stat. 3221 (1984), and the Federal Facility Compliance Act of 1992, Pub. L. No. 102-386, 106
25 Stat. 1505 (1992).

26
27 **Site Treatment Plan or STP:** This plan for developing mixed waste treatment technologies and
28 capacities for **INEEL** covered waste, as approved by DEQ pursuant to the FFC Act of 1992, Pub. L. No.
29 102-386, 106 Stat. 1505 (1992).

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1 **Storage:** The term shall have the meaning set forth in Section 1004(33) of RCRA (42 U.S.C. §
2 6903(33)), 40 C.F.R. § 260.10, and IDAPA 16.01.05.000 et seq., the holding of hazardous waste for a
3 temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.
4

5 **Transuranic Waste or TRU Waste:** The term shall have the meaning set forth in Section 11(ee)
6 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2014(ee) and DOE Order 5820.2A (currently
7 defined in the order as "radioactive waste that contains greater than 100 nCi/g of isotopes with atomic
8 numbers greater than 92 and half-lives greater than 20 years") or any successor DOE orders and
9 amendments.
10