Appendix A: Environmental Statutes and Regulations



The following environmental statutes and regulations apply, in whole or in part, to the Idaho National Laboratory (INL) or at the INL Site boundary:

- 10 CFR 830, 2022, Subpart A, "Quality Assurance Requirements," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://www.ecfr.gov/current/title-10/chapter-III/part-830/subpart-A
- 10 CFR 1021, 2022, "National Environmental Policy Act Implementing Procedures," *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://www.energy.gov/sites/prod/files/10CFRPart1021.pdf.
- 10 CFR 1022, 2022, "Compliance with Floodplain and Wetland Environmental Review Requirements," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://www.energy.gov/sites/prod/files/10CFRPart1022.pdf.
- 36 CFR 79, 2022, "Curation of Federally-Owned and Administered Archeological Collections," U.S. Department of the Interior, National Park Service, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-36/pt36.1.79.
- 36 CFR 800, 2022, "Protection of Historic Properties," U.S. Department of the Interior, National Park Service, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-36/cfr800 main.
- 40 CFR 50, 2022, "National Primary and Secondary AmbientAir Quality Standards," U.S. Environmental Protection Agency, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.2.50.
- 40 CFR 61, 2022, "National Emission Standards for Hazardous Air Pollutants," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.10.61.
- 40 CFR 61, Subpart H, 2022, "National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities," *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.10.61#sp40.10.61.h.
- 40 CFR 84, 2022, "Phasedown of Hydrofluorocarbons," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-84.
- 40 CFR 112, 2022, "Oil Pollution Prevention," U.S. Environmental Protection Agency, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/cfr112_main.
- 40 CFR 122, 2022, "EPA Administered Permit Programs: the National Pollutant Discharge Elimination System," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.24.122.
- 40 CFR 141, 2022, "National Primary Drinking Water Regulations," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.25.141.
- 40 CFR 142, 2022, "National Primary Drinking Water Regulations Implementation," *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.25.142.
- 40 CFR 143, 2022, "National Secondary Drinking Water Regulations," *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.25.143.
- 40 CFR 150.17, 2022, "Addresses for the Office of Pesticide Programs," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/Volume-26/Chapter-I/Subchapter-E.
- 40 CFR 260, 2022, "Hazardous Waste Management System: General," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.260.



APPENDIX A: ENVIRONMENTAL STATUTES AND REGULATIONS



- 40 CFR 261, 2022, "Identification and Listing of Hazardous Waste," U.S. Environmental Protection Agency, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.261.
- 40 CFR 262, 2022, "Standards Applicable to Generators of Hazardous Waste," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.262.
- 40 CFR 263, 2022, "Standards Applicable to Transporters of Hazardous Waste," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.263.
- 40 CFR 264, 2022, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.264.
- 40 CFR 265, 2022, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.28.265.
- 40 CFR 267, 2022, "Standards for Owners and Operators of Hazardous Waste Facilities Operating under a Standardized Permit," U.S. Environmental Protection Agency, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/pt40.29.267.
- 40 CFR 270.13, 2022, "Contents of Part A of the Permit Application," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/Section-270.13.
- 40 CFR 300, 2022, "National Oil and Hazardous Substances Pollution Contingency Plan," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-40/cfr300_main.
- 40 CFR 761, Subpart J, 2022, "General Records and Reports," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://www.ecfr.gov/current/title-40/chapter-I/subchapter-R/part-761/subpart-J.
- 40 CFR 1500 1508, 2022, "National Environmental Policy Act (NEPA), Purpose, Policy, and Mandate," Code of Federal Regulations, Office of the Federal Register. Available electronically at https://www.energy.gov/sites/prod/files/NEPA-40CFR1500_1508.pdf.
- 43 CFR 7, 2022, "Protection of Archeological Resources," U.S. Department of the Interior, National Park Service, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-43/cfr7_main.
- 50 CFR 17, 2022, "Endangered and Threatened Wildlife and Plants," U.S. Department of the Interior, Fish and Wildlife Service, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-50/pt50.2.17.
- 50 CFR 226, 2022, "Designated Critical Habitat," U.S. Department of Commerce, National Marine Fisheries Service, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-50/pt50.10.226.
- 50 CFR 402, 2022, "Interagency Cooperation Endangered Species Act of 1973, as Amended," U.S. Department of the Interior, Fish and Wildlife Service, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-50/cfr402_main.
- 50 CFR 424, 2022, "Listing Endangered and Threatened Species and Designating Critical Habitat," U.S. Department of the Interior, Fish and Wildlife Service, *Code of Federal Regulations*, Office of the Federal Register. Available electronically at https://ecfr.io/Title-50/cfr424 main.
- 50 CFR 450–453, 2022, "Endangered Species Exemption Process," U.S. Department of the Interior, Fish and Wildlife Service, Code of Federal Regulations, Office of the Federal Register. Available electronically at https://ecfr.io/Title-50/pt50.11.450.
- 42 USC § 9601 et seq., 1980, "Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/Superfund)," United States Code.
- DOE O 231.1B, 2011, "Environment, Safety, and Health Reporting," Change 1, U.S. Department of Energy.



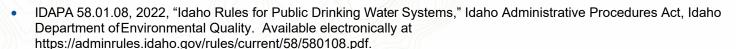
APPENDIX A: ENVIRONMENTAL STATUTES AND REGULATIONS



- DOE O 414.1D, 2011, "Quality Assurance," Change 1, U.S. Department of Energy.
- DOE O 435.1, 2001, "Radioactive Waste Management," Change 1, U.S. Department of Energy.
- DOE O 436.1, 2011, "Departmental Sustainability," U.S. Department of Energy.
- DOE O 458.1, 2020, "Radiation Protection of the Public and the Environment," U.S. Department of Energy.
- DOE Standard 1196-2011, 2011, "Derived Concentration Technical Standard," U.S. Department of Energy.
- Executive Order 11514, 1970, "Protection and Enhancement of Environmental Quality."
- Executive Order 11988, 1977, "Floodplain Management."
- Executive Order 11990, 1977, "Protection of Wetlands."
- Executive Order 12344, 1982, "Naval Nuclear Propulsion Program."
- Executive Order 12580, 1987, "Superfund Implementation."
- Executive Order 12856, 1993, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements."
- Executive Order 12873, 1993, "Federal Acquisition, Recycling, and Waste Prevention."
- Executive Order 13101, 1998, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition."
- Executive Order 13112, 2016, "Safeguarding the Nation from the Impacts of Invasive Species."
- Executive Order 13287, 2003, "Preserve America."
- Executive Order 13693, 2015, "Planning for Federal Sustainability in the Next Decade."
- Executive Order 13834, 2018, "Efficient Federal Operations."
- Executive Order 13990, 2021, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis."
- Executive Order 14008, 2021, "Tackling the Climate at Home and Abroad."
- Executive Order 14057, 2021 "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability."
- IDAPA 02.06.09, 2022, "Rules Governing Invasive Species and Noxious Weeds," Idaho Administrative Procedures
 Act, Idaho Department of Environmental Quality. Available electronically at
 https://adminrules.idaho.gov/rules/current/02/020609.pdf.
- IDAPA 58.01.01, 2022, "Rules for the Control of Air Pollution in Idaho," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580101.pdf.
- IDAPA 58.01.02, 2022, "Water Quality Standards," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580102.pdf.
- IDAPA 58.01.02.851, 2022, "Petroleum Release Reporting, Investigation, And Confirmation," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580102.pdf.
- IDAPA 58.01.03, 2022, "Individual/Subsurface Sewage Disposal Rules," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580103.pdf.
- IDAPA 58.01.05, 2022, "Rules and Standards for Hazardous Waste," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580105.pdf.
- IDAPA 58.01.06, 2022, "Solid Waste Management Rules," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580106.pdf.



APPENDIX A: ENVIRONMENTAL STATUTES AND REGULATIONS



- IDAPA 58.01.11, 2022, "Ground Water Quality Rule," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580111.pdf.
- IDAPA 58.01.15, 2022, "Rules Governing the Cleaning of Septic Tanks," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/2006/58/0115.pdf.
- IDAPA 58.01.16, 2022, "Wastewater Rules," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580116.pdf.
- IDAPA 58.01.17, 2021, "Recycled Water Rules," Idaho Administrative Procedures Act, Idaho Department of Environmental Quality. Available electronically at https://adminrules.idaho.gov/rules/current/58/580117.pdf.
- Idaho Statute Title 22, Chapter 19, "The Idaho Invasive Species Act of 2008," 2022. Available electronically at https://legislature.idaho.gov/statutesrules/idstat/Title22/T22CH19/.
- Idaho Statute Title 22, Chapter 24, "Noxious Weeds," 2022. Available electronically at https://legislature.idaho.gov/statutesrules/idstat/Title22/T22CH24/.

U.S. Department of Energy (DOE) Order 458.1 Ch. 3 provides the principal requirements for protection of the public and environment at the INL Site. The DOE public dose limit is shown in Table A-1, along with the Environmental Protection Agency statute for the protection of the public, for the airborne pathway only.

Derived Concentration Standards are established to support DOE O 458.1 in DOE Standard 1196- 2011 (DOE-STD-1196-2011), "Derived Concentration Technical Standard." These quantities represent the concentration of a given radionuclide in either water or air that results in a member of the public receiving 100 mrem (1 mSv) effective dose following continuous exposure for one year for each of the following pathways: ingestion of water, submersion in air, and inhalation. The Derived Concentration Standards used by the environmental surveillance programs at the INL Site are shown in Table A-2. The most restrictive Derived Concentration Standard is listed when the soluble and insoluble chemical forms differ. The Derived Concentration Standards consider only the inhalation of air, ingestion of water, and submersion in air.

The Environmental Protection Agency National Ambient Air Quality Standards may be found at https://www.epa.gov/criteria-air-pollutants/naaqs-table.

Water quality standards are dependent on the type of drinking water system sampled. Tables A-4 through A-6 list maximum contaminant levels set by the Environmental Protection Agency for public drinking water systems in 40 Code of Federal Regulations 141 (2022) and the Idaho groundwater quality values from IDAPA 58.01.11 (2022). Table A-7 lists the environmental permits for the INL Site.

Table A-1. Radiation standards for protection of the public in the vicinity of DOE facilities.

DADIATION CTANDADD	EFFECTIVE DOSE EQUIVALENT		
RADIATION STANDARD	(mrem/yr)	(mSv/yr)	
DOE standard for routine DOE activities (all pathways)	100ª	1	
EPA standard for site operations (airborne pathway only)	10	0.1	

a. The effective dose equivalent for any member of the public from all routine DOE operations, including remedial activities, and release of naturally occurring radionuclides shall not exceed this value. Routine operations refer to normal, planned operations and do not include accidental or unplanned releases.





Table A-2. Derived concentration standards for radiation protection.

DERIVED CONCENT	DERIVED CONCENTRATION STANDARD ^a		DERIVED CONCENTRATION STANDARD		
RADIONUCLIDE	IN AIR (μCi/ml)	IN WATER (μCi/ml)	RADIONUCLIDE	IN AIR (μCi/ml)	IN WATER (μCi/ml)
Gross Alpha ^b	3.4 x 10 ⁻¹⁴	1.4 x 10 ⁻⁷	Antimony-125	3.1×10^{-10}	2.7 x 10 ⁻⁵
Gross Beta ^c	2.5 x 10 ⁻¹¹	1.1 x 10 ⁻⁶	Iodine-129 ^f	1.0×10^{-10}	3.3 x 10 ⁻⁷
Tritium (tritiated water)	2.1 x 10 ⁻⁷	1.9 x 10 ⁻³	Iodine-131 ^f	4.1×10^{-10}	1.3 x 10 ⁻⁶
Carbon-14	6.6 x 10 ⁻¹⁰	6.2 x 10 ⁻⁵	Iodine-132 ^f	3.0 x 10 ⁻⁸	9.8 x 10 ⁻⁵
Sodium-24	7.0 x 10 ⁻⁹	7.2 x 10 ⁻⁵	Iodine-133 ^f	2.0 x 10 ⁻⁹	6.0 x 10 ⁻⁶
Argon-41 ^d	1.4 x 10 ⁻⁸		Iodine-135 ^f	9.7 x 10 ⁻⁹	3.0 x 10 ⁻⁵
Chromium-51	9.4 x 10 ⁻⁸	7.9 x 10 ⁻⁴	Xenon-131m ^{d,e}	2.4 x 10 ⁻⁶	_
Manganese-54	1.1 x 10 ⁻⁹	4.4 x 10 ⁻⁵	Xenon-133 ^d	6.3 x 10 ⁻⁷	_
Cobalt-58	1.7 x 10 ⁻⁹	3.9 x 10 ⁻⁵	Xenon-133m ^{d,e}	6.6 x 10 ⁻⁷	_
Cobalt-60	1.2 x 10 ⁻¹⁰	7.2 x 10 ⁻⁶	Xenon-135 ^d	7.8 x 10 ⁻⁸	_
Zinc-65	1.6 x 10 ⁻⁹	8.3 x 10 ⁻⁶	Xenon-135m ^{d,e}	4.5 x 10 ⁻⁸	_
Krypton-85 ^d	3.6 x 10 ⁻⁶	_	Xenon-138d	1.6 x 10 ⁻⁸	_
Krypton-85m ^{d,e}	1.3 x 10 ⁻⁷	_	Cesium-134	1.8 x 10 ⁻¹⁰	2.1 x 10 ⁻⁶
Krypton-87 ^d	2.2 x 10 ⁻⁸	_	Cesium-137	9.8 x 10 ⁻¹¹	3.0 x 10 ⁻⁶
Krypton-88 ^d	8.8 x 10 ⁻⁹	_	Cesium-138	7.5 x 10 ⁻⁸	3.1 x 10 ⁻⁴
Rubidium-88	1.2 x 10 ⁻⁷	3.2 x 10 ⁻⁴	Barium-139	5.8 x 10 ⁻⁸	2.4 x 10 ⁻⁴
Rubidium-89	1.5 x 10 ⁻⁷	6.6 x 10 ⁻⁴	Barium-140	6.2 x 10 ⁻¹⁰	1.1 x 10 ⁻⁵
Strontium-89	4.6 x 10 ⁻¹⁰	1.1 x 10 ⁻⁵	Cerium-141	9.9 x 10 ⁻¹⁰	4.0 x 10 ⁻⁵
Strontium-90	2.5 x 10 ⁻¹¹	1.1 x 10 ⁻⁶	Cerium-144	7.1 x 10 ⁻¹¹	5.5 x 10 ⁻⁶
Yttrium-91m ^e	3.1 x 10 ⁻⁷	2.7 x 10 ⁻³	Plutonium-238	3.7 x 10 ⁻¹⁴	1.5 x 10 ⁻⁷
Zirconium-95	6.3 x 10 ⁻¹⁰	3.1 x 10 ⁻⁵	Plutonium-239	3.4 x 10 ⁻¹⁴	1.4 x 10 ⁻⁷
Technetium-99me	1.7 x 10 ⁻⁷	1.4 x 10 ⁻³	Plutonium-240	3.4 x 10 ⁻¹⁴	1.4 x 10 ⁻⁷
Ruthenium-103	1.3 x 10 ⁻⁹	4.2 x 10 ⁻⁵	Plutonium-241	1.8 x 10 ⁻¹²	7.6 x 10 ⁻⁶
Ruthenium-106	5.6 x 10 ⁻¹¹	4.1 x 10 ⁻⁶	Americium-241	4.1 x 10 ⁻¹⁴	1.7 x 10 ⁻⁷

a. Derived concentration standards are from DOE-STD-1196-2011 (Derived Concentration Technical Standard) and support the implementation of DOE O 458.1. They are based on a committed effective dose equivalent of 100 mrem/yr (1 mSv) for ingestion or inhalation of a radionuclide for one year. Inhalation values shown represent the most restrictive lung retention class.



b. Based on the most restrictive human-made alpha emitter (239/240Pu).

c. Based on the most restrictive human-made beta emitter (90Sr).

d. The DCS for air immersion is used because there is no inhaled air DCS established for the radionuclide.

e. An "m" after the number refers to a metastable form of the radionuclide.

f. Particulate aerosol form in air.

Table A-3. Environmental Protection Agency maximum contaminant levels for public drinking water systems and state of Idaho groundwater quality standards for radionuclides and inorganic contaminants.

Gross alpha (pCi/L) Gross beta (mrem/yr) Beta/gamma emitters Radium-226 plus -228 (pCi/L) Gross beta (mrem/yr) Radium-90 (pCi/L)	15 4 Concentrations resulting in 4 mrem total body or organ dose equivalent 5	15 4 4 mrem/yr effective dose equivalent 5
Beta/gamma emitters Radium-226 plus -228 (pCi/L)	Concentrations resulting in 4 mrem total body or organ dose equivalent	4 mrem/yr effective dose equivalent
Radium-226 plus -228 (pCi/L)	total body or organ dose equivalent 5	equivalent
		5
Strontium-90 (nCi/L)		3
Aromani 50 (PCI E)	8	8
ritium (pCi/L)	20,000	20,000
Jranium (μg/L)	30	_
Arsenic (mg/L)	0.01	0.05
Antimony (mg/L)	0.006	0.006
Asbestos (fibers/L)	7 million	7 million
Barium (mg/L)	2	2
Beryllium (mg/L)	0.004	0.004
Cadmium (mg/L)	0.005	0.005
Chromium (mg/L)	0.1	0.1
Copper (mg/L)	1.3	1.3
Cyanide (mg/L)	0.2	0.2
luoride (mg/L)	4	4
Lead ^a (mg/L)	0.015^{a}	0.015
Mercury (mg/L)	0.002	0.002
Vitrate (as N) (mg/L)	10	10
Nitrite (as N) (mg/L)		1
Nitrate and Nitrite (both as N) (mg/L)	10	10
elenium (mg/L)	0.05	0.05
hallium (mg/L)	0.002	0.002

a. Treatment technique action level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a public water system must follow.

Table A-4. Environmental Protection Agency maximum contaminant levels for public drinking water systems and state of Idaho groundwater quality standards for organic contaminants.

CONSTITUENT	MAXIMUM CONTAMINANT LEVEL (mg/L)	GROUNDWATER QUALITY STANDARD (mg/L)
Benzene	0.005	0.005
Carbon tetrachloride	0.005	0.005
m-Dichlorobenzene	<u> </u>	0.6
o-Dichlorobenzene	0.6	0.6
p-Dichlorobenzene	0.075	0.075
1,2-Dichloroethane	0.005	0.005
1,1-Dichloroethylene	0.007	0.007
cis-1,2-Dichloroethylene	0.07	0.07
trans-1,2-Dichloroethylene	0.1	0.1
Dichloromethane	0.005	0.005
1,2-Dichloropropane	0.005	0.005
Ethylbenzene	0.7	0.7
Monochlorobenzene	0.1	0.1
Styrene	0.1	0.1
Tetrachloroethylene	0.005	0.005
Toluene	1.0	1.0
1,2,4-Trichlorobenzene	0.07	0.07
1,1,1-Trichloroethane	0.2	0.2
1,1,2-Trichloroethane	0.005	0.005
Trichloroethylene	0.005	0.005
Vinyl chloride	0.002	0.002
Xylenes (total)	10.0	10.0
Bromate	0.01	<u> </u>
Bromodichloromethane ^a	<u>_</u>	0.1
Bromoform ^a		0.1
Chlorodibromomethane ^a	_	0.1
Chloroform ^a		0.002
Chlorite	1.0	_
Haloacetic acids (HAA5)	0.06	
Total Trihalomethanes (TTHMs)	0.08	0.1

a. These four compounds do not have individual MCLs. They are combined to give an MCL of 0.08 mg/L for total trihalomethanes.

Table A-5. Environmental Protection Agency maximum contaminant levels for public drinking water systems and state of Idaho groundwater quality standards for synthetic organic contaminants.

CONSTITUENT	MAXIMUM CONTAMINANT LEVEL (mg/L)	GROUNDWATER QUALITY STANDARD (mg/L)
Alachlor	0.002	0.002
Atrazine	0.003	0.003
Carbofuran	0.04	0.04
Chlordane	0.002	0.002
Dibromochloropropane	0.0002	0.0002
2,4-Dichlorophenoxyacetic acid	0.07	0.07
Ethylene dibromide	0.00005	0.00005
Heptachlor	0.0004	0.0004
Heptachlor epoxide	0.0002	0.0002
Lindane	0.0002	0.0002
Methoxychlor	0.04	0.04
Polychlorinated biphenyls	0.0005	0.0005
Pentachlorophenol	0.001	0.001
Toxaphene	0.003	0.003
2,4,5-TP (silvex)	0.05	0.05
Benzo(a)pyrene	0.0002	0.0002
Dalapon	0.2	0.2
Di(2-ethylhexyl) adipate	0.4	0.4
Di(2-ethylhexyl) phthalate	0.006	0.006
Dinoseb	0.007	0.007
Diquat	0.02	0.02
Endothall	0.1	0.1
Endrin	0.002	0.002
Glyphosate	0.7	0.7
Hexachlorobenzene	0.001	0.001
Hexachlorocyclopentadiene	0.05	0.05
Oxamyl (vydate)	0.2	0.2
Picloram	0.5	0.5
Simazine	0.004	0.004
2,3,7,8-TCDD (dioxin)	3 x 10 ⁻⁸	3 x 10 ⁻⁸

Table A-6. Environmental Protection Agency national secondary drinking water regulations and state of Idaho groundwater quality standards for secondary contaminants.

CONSTITUENT	SECONDARY STANDARD ^a	GROUNDWATER QUALITY STANDARD
Aluminum (mg/L)	0.05 to 0.2	0.2
Chloride (mg/L)	250	250
Color (color units)	15	15
Copper (mg/L)	1.0	_
Corrosivity	Noncorrosive	_
Foaming agents (mg/L)	0.5	0.5
Iron (mg/L)	0.3	0.3
Manganese (mg/L)	0.05	0.05
Odor (threshold odor number)	3	3
pH	6.5 to 8.5	6.5 to 8.5
Silver (mg/L)	0.1	0.1
Sulfate (mg/L)	250	250
Total dissolved solids (mg/L)	500	500
Zinc (mg/L)	5	5

a. The Environmental Protection Agency has not established National Primary Drinking Water Regulations that set mandatory water quality standards (maximum contaminant levels) for these constituents because these contaminants are not considered a risk to human health. The Environmental Protection has established National Secondary Drinking Water Regulations that set secondary maximal contaminant levels as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.



Table A-7. Environmental permits for the INL Site (2021).

PERMIT T	YPE	ACTIVE PERMITS		
	AIR EMISSIONS			
Synthetic Minor		1		
	GROUNDWATER			
Injection Well		2		
Well construction		3ª		
SURFACE WATER				
Reuse Permits		3		
Industrial Wastewater Acceptance		1		
RESOURCE CONSERVATION AND RECOVERY ACT				
Part A		2 ^b		
Part B		7 ^b		
ECOLOGICAL				
Migratory Bird Treaty Act Special Purpo	ose Permit	2		
Wildlife Collection/Banding/Possession	Permit	3		

- a. Construction of wells USGS-150, USGS-151, and USGS-152 have been cored and are currently on hold. Additional construction is planned for USGS-151 and USGS-152 during FY 2023. Borehole USGS-150 is planned for abandonment in fiscal year 2023. Permits are only required for construction of wells, not operation.
- b. Part A and B are considered a single RCRA Permit that comprises several volumes.