PENDING RULES

COMMITTEE RULES
REVIEW BOOK

Submitted for Review Before

House Environment, Energy & Technology Committee

67th Idaho Legislature
First Regular Session – 2023

Prepared by:

Office of the Administrative Rules Coordinator
Division of Financial Management

January 2023

HOUSE ENVIRONMENT, ENERGY, & TECHNOLOGY COMMITTEE

ADMINISTRATIVE RULES REVIEW

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2023 Legislative Session

IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.02 – WATER QUALITY STANDARDS

DOCKET NO. 58-0102-2201

NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

LINK: LSO Rules Analysis Memo

EFFECTIVE DATE: This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2023 Idaho State Legislature for final approval. The pending rule will become final and effective upon the adjournment sine die of the First Regular Session of the Sixty-seventh Idaho Legislature unless the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

AUTHORITY: In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Sections 39-105, 39-107, and 39-3601 et seq., Idaho Code.

DESCRIPTIVE SUMMARY: A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, March 2, 2022, Vol. 22-3, pages 28 through 46.

After consideration of public comments, Subsection 210.01.b., Footnote k, and Subsection 210.03.e. have been revised. The remainder of the rule has been adopted as initially proposed. The board meeting documents are available at https://www.deq.idaho.gov/water-quality-docket-no-58-0102-2201/ or by contacting the undersigned.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 6th day of July, 2022

Caroline Moores
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THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE

AUTHORITY: In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This rulemaking action is authorized by Sections 39-105, 39-107, and 39-3601 et seq., Idaho Code.

PUBLIC HEARING SCHEDULE: Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before March 18, 2022. If no such written request is received, a public hearing pursuant to Section 67-5222(2), Idaho Code, will not be held. Thirteen public meetings were held during the negotiated rulemaking process. The public will have the opportunity to provide oral comments on the proposed rule during the meeting of the Idaho Board of Environmental Quality (Board) scheduled for May 25 and 26, 2022. The meeting details are in the Notice of Meeting of the Idaho Board of Environmental Quality, Docket No. 58-0102-2201, published in the March 2, 2022 Idaho Administrative Bulletin, Vol. 22-3, and available at https://www.deq.idaho.gov/water-quality-docket-no-58-0102-2201.

DESCRIPTIVE SUMMARY: This rulemaking was initiated to update Idaho's human health criteria for arsenic and negotiated under Docket No. 58-0102-1801. The proposed revisions are found in Subsections 210.01.a. and b., 210.03.d. and e., and 210.05.b.

In May 2016, EPA entered into a Consent Decree with Northwest Environmental Advocates to reconsider EPA's 2010 approval of Idaho's human health criteria for arsenic. In September 2016, EPA disapproved Idaho's human health criteria of 10 µg/L arsenic for both consumption of fish only and consumption of fish & water. The Consent Decree requires that EPA propose new human health criteria for arsenic by November 15, 2018, and that EPA either approve Idaho's submittal of revised human health criteria for arsenic or promulgate federal criteria by July 15, 2019. In June 2018, the Court granted the Unopposed Motion to Modify Consent Decree, extending the November 15, 2018, and July 15, 2019, deadlines to November 15, 2022, and November 15, 2023, respectively.

This rulemaking will enable Idaho to adopt human health criteria for arsenic under state rulemaking and may prevent federal promulgation of criteria for Idaho by EPA.

Idahoans that recreate in, drink from, or fish Idaho's surface waters, and any who discharge pollutants to those same waters, may be interested in commenting on this proposed rule. The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed. After consideration of public comments, DEQ intends to present the final proposal to the Board in May 2022 for adoption of a pending rule. The rule is expected to be final and effective upon the conclusion of the 2023 legislative session if adopted by the Board and approved by the Idaho Legislature.

EFFECTIVE FOR CLEAN WATER ACT PURPOSES: Water quality standards adopted and submitted to EPA since May 30, 2000, are not effective for federal Clean Water Act (CWA) purposes until EPA approves them (see 40 CFR 131.21). This is known as the Alaska Rule. This rulemaking will be promulgated so that the existing rule effective for CWA purposes remains in the Idaho Administrative Code until EPA approves the rule revisions. Notations explaining the effectiveness of the rule sections are also included. Upon EPA approval, the revised rule will become effective for CWA purposes and the previous rule and notations will be deleted from the Idaho Administrative Code. Information regarding the status of EPA review will be posted at EPA Actions on Proposed Standards.

INCORPORATION BY REFERENCE: Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: Not applicable.

NEGOTIATED RULEMAKING: A robust negotiated process for this rulemaking was conducted under docket 58-0102-1801. At the request of the Office of the Administrative Rules Coordinator and as a procedural requirement, a new docket number was generated for this proposed rulemaking. The Notice of Negotiated Rulemaking was published in the April 4, 2018, Idaho Administrative Bulletin, Vol. 18-4, pages 82-83, and posted on DEQ's website. Eight meetings were held between April 2018 and November 2020. On December 9, 2020, a preliminary draft rule was posted on DEQ's website. Five additional meetings were held between December 2020 and November 2021 for a total of 13 negotiated rulemaking meetings. Stakeholders and members of the public participated by receiving email

notifications, attending the meetings, reviewing DEQ's presentations and supporting information, and submitting comments. Key information was posted on DEQ's website and distributed to persons who participated in the negotiated rulemaking.

All comments received during the negotiated rulemaking process were considered by DEQ when making decisions regarding the development of the rule. At the conclusion of the negotiated rulemaking process, DEQ submitted the draft rule to the Division of Financial Management for review. DEQ formatted the draft for publication as a proposed rule and is now seeking public comment. The negotiated rulemaking record, which includes the negotiated rule drafts, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/rulemaking/water-quality-docket-no-58-0102-1801/.

IDAHO CODE SECTION 39-107D STATEMENT: This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning this rulemaking, contact Beth Spelsberg at Elizabeth.spelsberg@deq.idaho.gov, (208)373-0158.

SUBMISSION OF WRITTEN COMMENTS: Anyone may submit written comments by mail, fax, or email at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before April 1, 2022.

Dated this 2nd day of March, 2022.

THE FOLLOWING IS THE TEXT OF PENDING DOCKET NO. 58-0102-2201

Substantive changes have been made in the pending rule.
Italicized red text *double underscored* indicates changes between the text of the proposed rule as adopted in the pending rule.

210. NUMERIC CRITERIA FOR TOXIC SUBSTANCES FOR WATERS DESIGNATED FOR AQUATIC LIFE, RECREATION, OR DOMESTIC WATER SUPPLY USE.

01. Criteria for Toxic Substances. The criteria of Section 210 apply to surface waters of the state as provided in Tables 1 and 2. (3-31-22)

a. Table 1 contains criteria set for protection of aquatic life. Criteria for metals (arsenic through zinc) are expressed as dissolved fraction unless otherwise noted. For purposes of these criteria, dissolved fraction means that which passes through a forty-five hundredths (0.45) micron filter. (3-31-22)

Subsections 210.01 and 210.01.a. are effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

01. Criteria for Toxic Substances. The criteria of Section 210 apply to surface waters of the state as provided in Tables 1 and 2 Criteria for metals (arsenic through zinc) listed in Tables 1 and 2 are expressed as a dissolved fraction (i.e., passes through a forty-five hundredths (0.45) micron filter) unless otherwise noted. ~~*(3-31-22)*~~( )

a. Table 1 contains criteria ~~*set for*~~ to protect~~*ion of*~~ aquatic life. ~~*Criteria for metals (arsenic through zinc) are expressed as dissolved fraction unless otherwise noted. For purposes of these criteria, dissolved fraction means that which passes through a forty-five hundredths (0.45) micron filter.*~~ ~~*(3-31-22)*~~( )

Subsections 210.01 and 210.01.a. are not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

Table 1. Criteria for Protection of Aquatic Life

Compound	[a] CAS Number	[b] CMC (µg/L)		[b] CCC (µg/L)	
Inorganic Compounds/Metals					
Arsenic	7440382	340	c	150	c
Cadmium	7440439	1.3	f	0.6	f
Chromium III	16065831	570	f	74	f
Chromium VI	18540299	16	c	11	c
Copper	7440508	12.3	k	7.6	k
Lead	7439921	65	f	2.5	f
Mercury	7439976		e		e
Note: In 2005, Idaho adopted EPA's recommended methylmercury fish tissue criterion for protection of human health (docket 58-0102-0302). The decision was made to remove the old tissue-based aquatic life criteria and rely on the fish tissue criterion to provide protection for aquatic life as well as human health. Thus, current Idaho water quality standards do not have mercury water column criteria for the protection of aquatic life. While EPA approved Idaho's adoption of the fish tissue criterion in September 2005, it had withheld judgment on Idaho's removal of aquatic life criteria. On December 12, 2008, EPA disapproved Idaho's removal of the old aquatic life criteria. The water column criteria for total recoverable mercury published in 2004 Idaho Administrative Code continue to apply and are effective for CWA purposes. For more information go to http://www.deq.idaho.gov/epa-actions-on-proposed-standards.					
Nickel	7440020	470	f	52	f
Selenium	7782492	m		l	
Silver	7440224	3.4	f		
Zinc	7440666	120	f	120	f
Inorganic Compounds/Non-Metals					
Chlorine		19	h	11	h
Cyanide	57125	22	g	5.2	g

Table 1. Criteria for Protection of Aquatic Life					
Compound	**[a] CAS Number**	**[b] CMC (µg/L)**		**[b] CCC (µg/L)**	
Organic Compounds					
Acrolein	107028	--[1] ---------- 3[2]		--[1] ---------- 3[2]	
[1]Effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved. [2]Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved.					
Aldrin	39002	3			
gamma-BHC (Lindane)	58899	2		0.08	
Carbaryl	63252	--[1] ---------- 2.1[2]		--[1] ---------- 2.1[2]	
[1]Effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved. [2]Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved.					
Chlordane	57749	2.4		0.0043	
4,4'-DDT	50293	1.1		0.001	
Diazinon	333415	--[1] ---------- 0.17[2]		--[1] ---------- 0.17[2]	
[1]Effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved. [2]Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1802 have been approved.					
Dieldrin	60571	2.5		0.0019	
alpha-Endosulfan	959988	0.22		0.056	
beta-Endosulfan	33213659	0.22		0.056	
Endrin	72208	0.18		0.0023	
Heptachlor	76448	0.52		0.0038	
Heptachlor Epoxide	1024573	0.52		0.0038	
Pentachlorophenol	87865	20	i	13	i
Polychlorinated Biphenyls PCBs	j			0.014	j
Toxaphene	8001352	0.73		0.0002	

Table 1. Criteria for Protection of Aquatic Life					
Compound	**[a] CAS Number**	**[b] CMC (µg/L)**	**[b] CCC (µg/L)**		
Footnotes for Table 1. Criteria for Protection of Aquatic Life					
a. Chemical Abstracts Service (CAS) registry numbers which provide a unique identification for each chemical.					
b. See definitions of Acute Criteria (CMC) and Chronic Criteria (CCC), Section 010 of these rules.					
c. Criteria for these metals are expressed as a function of the water effect ratio, WER, as defined in Subsection 210.03.c.iii. CMC = CMC column value X WER. CCC = CCC column value X WER.					
d. Criterion expressed as total recoverable (unfiltered) concentrations.					
e. No aquatic life criterion is adopted for inorganic mercury. However, the narrative criteria for toxics in Section 200 of these rules applies. The Department believes application of the human health criterion for methylmercury will be protective of aquatic life in most situations.					
f. Aquatic life criteria for these metals are a function of total hardness (mg/L as calcium carbonate), the pollutant's water effect ratio (WER) as defined in Subsection 210.03.c.iii. and multiplied by an appropriate dissolved conversion factor as defined in Subsection 210.02. For comparative purposes only, the example values displayed in this table are shown as dissolved metal and correspond to a total hardness of one hundred (100) mg/L and a water effect ratio of one (1.0).					
g. Criteria are expressed as weak acid dissociable (WAD) cyanide.					
h. Total chlorine residual concentrations.					
i. Aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows. Values displayed above in the table correspond to a pH of seven and eight tenths (7.8). CMC = exp(1.005(pH)-4.830) CCC = exp(1.005(pH)-5.290)					
j. PCBs are a class of chemicals which include Aroclors, 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825 and 12674112 respectively. The aquatic life criteria apply to this set of PCBs.					
k. Aquatic life criteria for copper shall be derived in accordance with Subsection 210.03.c.v. For comparative purposes only, the example values displayed in this table correspond to the Biotic Ligand Model output based on the following inputs: temperature = 14.9°C, pH = 8.16, dissolved organic carbon = 1.4 mg/L, humic acid fraction = 10%, calcium = 44.6 mg/L, magnesium = 11.0 mg/L, sodium = 11.7 mg/L, potassium = 2.12 mg/L, sulfate = 46.2 mg/L, chloride = 12.7 mg/L, alkalinity = 123 mg/L CaCO3, and sulfide = 1.00 x 10^{-8} mg/L.					
l. Chronic					**Short-term**
Egg-Ovary (mg/kg dw)	**Fish Tissue (mg/kg dw)**		**Water Column (µg/L)**		**Water Column (µg/L)**
Egg-Ovary	Whole-Body	Muscle	Water Lentic	Water Lotic	Water
15.1[1]	8.5[2]	11.3[2]	1.5 (30 day average)[3]	3.1 (30 day average)[3]	Intermittent Exposure Equation[3.4]
mg/kg dw – milligrams per kilogram dry weight, µg/L – micrograms per liter					
1. Egg-ovary supersedes any whole-body, muscle, or water column element when fish egg-ovary concentrations are measured. Single measurement of an average or composite sample of at least five (5) individuals of the same species. Not to be exceeded; DEQ will evaluate all representative egg-ovary data to determine compliance with this criterion element.					

Table 1. Criteria for Protection of Aquatic Life			
Compound	**[a] CAS Number**	**[b] CMC (µg/L)**	**[b] CCC (µg/L)**

2. Fish whole-body or muscle tissue supersedes water column element when both fish tissue and water concentrations are measured. Single measurement of an average or composite sample of at least five (5) individuals of the same species where the smallest individual is no less than seventy-five percent (75%) of the total length (size) of the largest individual. Not to be exceeded; DEQ will evaluate all representative whole body or muscle data to determine compliance with this criterion element.

3. Water column values are based on dissolved total selenium in water and are derived from fish tissue values via bioaccumulation modeling. Water column values are the applicable criterion element in the absence of steady-state condition fish tissue data. In fishless waters, selenium concentrations in fish from the nearest downstream waters may be used to assess compliance using methods provided in Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater, EPA-822-R-16-006, Appendix K: Translation of a Selenium Fish Tissue Criterion Element to a Site-Specific Water Column Value (June 2016).

4. Intermittent Exposure Equation=

$$\frac{WQC - C_{bkgrnd}(1 - f_{int})}{f_{int}}$$

where WQC is the applicable water column element, for either lentic or lotic waters; C_{bkgrnd} is the average background selenium concentration, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

m. There is no specific acute criterion for aquatic life; however, the aquatic life criterion is based on chronic effects of the selenium on aquatic life and is expected to adequately protect against acute effects.

(3-31-22)

b. Table 2 contains criteria ~~*set for*~~ to protect~~*ion of*~~ human health. The Water & Fish criteria apply to waters designated for domestic water supply use. The Fish Only criteria apply to waters designated for primary or secondary contact recreation use. ~~*(3-31-22)*~~( )

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**[a] CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
Inorganic Compounds/Metals						
Antimony	7440360		5.2	b	190	b
Arsenic[1]	7440382	Y	10	cdj	10	cdj

Note: In 2008, Idaho adopted 10 µg/L as its CWA arsenic criterion for both exposure through fish consumption only and exposure through drinking water+fish consumption, choosing the SDWA MCL due to concerns about background levels that exceed EPA's 304(a) criteria (docket 58-0102-0801). EPA approved this action in 2010. In June 2015, Northwest Environmental Advocates challenged EPA's 2010 approval. Court remanded action back to EPA. On September 15, 2016, EPA disapproved Idaho's adoption of10 µg/L. Neither EPA nor the state of Idaho has promulgated replacement criteria. For more information, go to http://www.deq.idaho.gov/epa-actions-on-proposed-standards.

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
[1]Effective for CWA purposes. Water & Fish value, Fish Only value, and footnotes continue to be effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved. See Arsenic[2] immediately below.						
Arsenic[2]	7440382	Y	10	cdj	~~10~~ 4.3; 8.0 µg/kg fish tissue	c~~dj~~k
~~*Note: In 2008, Idaho adopted 10 µg/L as its CWA arsenic criterion for both exposure through fish consumption only and exposure through drinking water+fish consumption, choosing the SDWA MCL due to concerns about background levels that exceed EPA's 304(a) criteria (docket 58-0102-0801). EPA approved this action in 2010. In June 2015, Northwest Environmental Advocates challenged EPA's 2010 approval. Court remanded action back to EPA. On September 15, 2016, EPA disapproved Idaho's adoption of10 µg/L. Neither EPA nor the state of Idaho has promulgated replacement criteria. For more information, go to http://www.deq.idaho.gov/epa-actions-on-proposed-standards.*~~						
[2]Not yet effective for CWA purposes. Fish Only value and footnote k are not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.						
Beryllium	7440417			e		e
Cadmium	7440439			e		e
Chromium III	16065831			e		e
Chromium VI	18540299			e		e
Copper	7440508		1300	j		
Lead	7439921			e		e
Methylmercury	22967926				0.3mg/kg	i
Nickel	7440020		58	b	100	b
Selenium	7782492		29	b	250	b
Thallium	7440280		0.017	b	0.023	b
Zinc	7440666		870	b	1,500	b
Inorganic Compounds/Non-Metals						
Cyanide	57125		3.9	b	140	b
Asbestos	1332214		7,000,000 Fibers/L	j		
Organic Compounds						
Acenaphthene	83329		26	b	28	b
Acenaphthylene	208968			e		e
Acrolein	107028		3.2	b	120	b
Acrylonitrile	107131	Y	0.60	bf	22	bf

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
Aldrin	309002	Y	2.5E-06	bf	2.5E-06	bf
Anthracene	120127		110	b	120	b
alpha-BHC	319846	Y	0.0012	bf	0.0013	bf
beta-BHC	319857	Y	0.036	bf	0.045	bf
gamma-BHC (Lindane)	58899		1.4	b	1.4	b
delta-BHC	319868			e		e
Benzene	71432		3.0	bf	28	b
Benzidine	92875	Y	0.0014	bf	0.033	bf
Benzo(a)Anthracene	56553	Y	0.0042	bf	0.0042	bf
Benzo(b)Fluoranthene	205992	Y	0.0042	bf	0.0042	bf
Benzo(k)Fluoranthene	207089	Y	0.042	bf	0.042	bf
Benzo(ghi)Perylene	191242			e		e
Benzo(a)Pyrene	50328	Y	0.00042	bf	0.00042	bf
Bis(2-Chloroethoxy) Methane	111911			e		e
Bis(2-Chloroethyl) Ether	111444	Y	0.29	bf	6.8	bf
Bis(2-Chloroisopropyl) Ether	108601		220	b	1,200	b
Bis(Chloromethyl) Ether	542881	Y	0.0015	bf	0.055	bf
Bis(2-Ethylhexyl) Phthalate	117817	Y	1.2	bf	1.2	bf
Bromoform	75252	Y	62	bf	380	bf
4-Bromophenyl Phenyl Ether	101553			e		e
Butylbenzyl Phthalate	85687		0.33	b	0.33	b
Carbon Tetrachloride	56235	Y	3.6	bf	15	bf
Chlorobenzene	108907		89	b	270	b
Chlordane	57749	Y	0.0010	bf	0.0010	bf
Chlorodibromomethane	124481	Y	7.4	bf	67	bf
Chloroethane	75003			e		e
2-Chloroethylvinyl Ether	110758			e		e
Chloroform	67663		61	b	730	b

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
2-Chloronaphthalene	91587		330	b	380	b
2-Chlorophenol	95578		30	b	260	b
Chlorophenoxy Herbicide (2,4-D)	94757		1,000	b	3,900	b
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	93721		82	b	130	b
4-Chlorophenyl Phenyl Ether	7005723			e		e
Chrysene	218019	Y	0.42	bf	0.42	bf
4,4'-DDD	72548	Y	0.00042	bf	0.00042	bf
4,4'-DDE	72559	Y	5.5E-05	bf	5.5E-05	bf
4,4'-DDT	50293	Y	9.8E-05	bf	9.8E-05	bf
Di-n-Butyl Phthalate	84742		8.2	b	8.3	b
Di-n-Octyl Phthalate	117840			e		e
Dibenzo (a,h) Anthracene	53703	Y	0.00042	bf	0.00042	bf
1,2-Dichlorobenzene	95501		700	b	1,100	b
1,3-Dichlorobenzene	541731		3.5	b	4.8	b
1,4-Dichlorobenzene	106467		180	b	300	b
3,3'-Dichlorobenzidine	91941	Y	0.29	bf	0.48	bf
Dichlorobromomethane	75274	Y	8.8	bf	86	bf
1,1-Dichloroethane	75343			e		e
1,2-Dichloroethane	107062	Y	96	bf	2,000	bf
1,1-Dichloroethylene	75354		310	b	5,200	b
2,4-Dichlorophenol	120832		9.6	b	19	b
1,2-Dichloropropane	78875	Y	8.5	bf	98	bf
1,3-Dichloropropene	542756	Y	2.5	bf	38	bf
Dieldrin	60571	Y	4.2E-06	bf	4.2E-06	bf
Diethyl Phthalate	84662		200	b	210	b
2,4-Dimethylphenol	105679		110	b	820	b
Dimethyl Phthalate	131113		600	b	600	b
Dinitrophenols	25550587		13	b	320	b

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
2,4-Dinitrophenol	51285		12	b	110	b
2,4-Dinitrotoluene	121142	Y	0.46	bf	5.5	bf
2,6-Dinitrotoluene	606202			e		e
1,2-Diphenylhydrazine	122667	Y	0.25	bf	0.65	bf
2, 3, 7, 8-TCDD Dioxin	1746016	Y	1.8E-08	bf	1.9E-08	bf
alpha-Endosulfan	959988		7.0	b	8.5	b
beta-Endosulfan	33213659		11	b	14	b
Endosulfan Sulfate	1031078		9.9	b	13	b
Endrin	72208		0.011	b	0.011	b
Endrin Aldehyde	7421934		0.38	b	0.40	b
Ethylbenzene	100414		32	b	41	b
Fluoranthene	206440		6.3	b	6.4	b
Fluorene	86737		21	b	22	b
Heptachlor	76448	Y	2.0E-05	bf	2.0E-05	bf
Heptachlor Epoxide	1024573	Y	0.00010	bf	0.00010	bf
Hexachlorobenzene	118741	Y	0.00026	bf	0.00026	bf
Hexachlorobutadiene	87683	Y	0.031	bf	0.031	bf
Hexachlorocyclohexane (HCH)-Technical	608731	Y	0.027	bf	0.032	bf
Hexachloro-cyclopentadiene	77474		1.3	b	1.3	b
Hexachloroethane	67721		0.23	b	0.24	b
Ideno (1,2,3-cd) Pyrene	193395	Y	0.0042	bf	0.0042	bf
Isophorone	78591	Y	330	bf	6,000	bf
Methoxychlor	72435		0.0054	b	0.0055	b
Methyl Bromide	74839		130	b	3,700	b
Methyl Chloride	74873			e		e
3-Methyl-4-Chlorophenol	59507		350	b	750	b
2-Methyl-4,6-Dinitrophenol	534521		1.6	b	8.6	b
Methylene Chloride	75092		38	b	960	b
Naphthalene	91203			e		e

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**		**Fish Only (µg/L unless otherwise specified)**	
Nitrobenzene	98953		12	b	180	b
2-Nitrophenol	88755			e		e
4-Nitrophenol	100027			e		e
N-Nitrosodimethylamine	62759	Y	0.0065	bf	9.1	bf
N-Nitrosodi-n-Propylamine	621647	Y	0.046	bf	1.5	bf
N-Nitrosodiphenylamine	86306	Y	3.14	bf	18	bf
Pentachlorobenzene	608935		0.035	b	0.036	b
Pentachlorophenol	87865	Y	0.11	bf	0.12	bf
Phenanthrene	85018			e		e
Phenol	108952		3,800	b	85,000	b
Polychlorinated Biphenyls PCBs	g	Y	0.00019	bfh	0.00019	bfh
Pyrene	129000		8.1	b	8.4	b
1,2,4,5-Tetrachlorobenzene	95943		0.0093	b	0.0094	b
1,1,2,2-Tetrachloroethane	79345	Y	1.4	bf	8.6	bf
Tetrachloroethylene	127184		15	b	23	b
Toluene	108883		47	b	170	b
Toxaphene	8001352	Y	0.0023	bf	0.0023	bf
1,2-Trans-Dichloroethylene	156605		120	b	1,200	b
1,2,4-Trichlorobenzene	120821		0.24	b	0.24	b
1,1,1-Trichloroethane	71556		11,000	b	56,000	b
1,1,2-Trichloroethane	79005	Y	4.9	bf	29	bf
Trichloroethylene	79016		2.6	b	11	b
2,4,5-Trichlorophenol	95954		140	b	190	b
2,4,6-Trichlorophenol	88062		1.5	b	2.0	b
Vinyl Chloride	75014	Y	0.21	bf	5.0	bf

Footnotes for Table 2. Criteria for Protection of Human Health

a. Chemical Abstracts Service (CAS) registry numbers which provide a unique identification for each chemical.

Table 2. Criteria for Protection of Human Health (based on consumption of:)				
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**	**Fish Only (µg/L unless otherwise specified)**

b. This criterion is based on input values to human health criteria calculation specified in Idaho's Technical Support Document (TSD) for Human Health Criteria Calculations - 2015. Criteria for non-carcinogens are calculated using the formula:

$$\textbf{AWQC} = \textbf{RfD} * \textbf{RSC} * \left(\frac{BW}{DI + (FI * BAF)}\right)$$

and criteria for carcinogens are calculated using the formula:

$$\textbf{AWQC} = \textbf{RSD} * \left(\frac{BW}{DI + (FI * BAF)}\right)$$

Where:
AWQC = Ambient water quality criterion (mg/L)

BW = Human Body Weight (kg), 80 is used in these criteria
DI = Drinking Water Intake, (L/day), 2.4 is used in these criteria
FI = Fish Intake, (kg/day), 0.0665 is used in these criteria

BAF = Bioaccumualtion Factor, L/kg, chemical specific value, see TSD
RfD = Reference dose (mg/kg-day), chemical specific value, see TSD

$$RSD = \frac{\text{Target Incremental Cancer Risk}}{\text{Cancer Potency Factor}}$$ (mg/kg-day), chemical specific value, see TSD

RSC = Relative Source Contribution, chemical specific value, see TSD

c. Inorganic forms only.

d. Criterion expressed as total recoverable (unfiltered) concentrations.

e. No numeric human health criteria has been established for this contaminant. However, permit authorities should address this contaminant in NPDES permit actions using the narrative criteria for toxics from Section 200 of these rules.

f. EPA guidance allows states to choose from a range of 10^{-4} to 10^{-6} for the incremental increase in cancer risk used in human health criteria calculation. Idaho has chosen to base this criterion on carcinogenicity of 10^{-5} risk.

g. PCBs are a class of chemicals which include Aroclors, 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825 and 12674112 respectively. The aquatic life criteria apply to this set of PCBs.

h. This criterion applies to total PCBs, (e.g. the sum of all congener, isomer, or Aroclor analyses).

Table 2. Criteria for Protection of Human Health (based on consumption of:)				
Compound	**a CAS Number**	**Carcinogen?**	**Water & Fish (µg/L unless otherwise specified)**	**Fish Only (µg/L unless otherwise specified)**
i. This fish tissue residue criterion (TRC) for methylmercury is based on a human health reference dose (RfD) of 0.0001 mg/kg body weight-day; a relative source contribution (RSC) estimated to be 27% of the RfD; a human body weight (BW) of 70 kg (for adults); and a total fish consumption rate of 0.0175 kg/day for the general population, summed from trophic level (TL) breakdown of TL2 = 0.0038 kg fish/day + TL3 = 0.0080 kg fish/day + TL4 = 0.0057 kg fish/day. This is a criterion that is protective of the general population. A site-specific criterion or a criterion for a particular subpopulation may be calculated by using local or regional data, rather than the above default values, in the formula: TRC = [BW x {RfD – (RSCxRfD)}] / Σ TL. In waters inhabited by species listed as threatened or endangered under the Endangered Species Act or designated as their critical habitat, the Department will apply the human health fish tissue residue criterion for methylmercury to the highest trophic level available for sampling and analysis.				
j. This criterion is based on the drinking water Maximum ~~*Containment*~~ Contaminant Level (MCL).				
k. For Fish Only exposure to inorganic arsenic, the human health criterion is:				
Fish Tissue (µg/kg wet-weight)	Water Column (µg/L)			
8.0[1]	4.3[2]			
[1]Fish tissue element is based on total recoverable inorganic arsenic in muscle or fillet. The fish tissue element supersedes the water column element *provided at least ninety (90) days have passed since any new activity or discharge has occurred within the water body.* Fish tissue element will be applied in accordance with Subsection 210.03.e. [2]Water column element is based on dissolved inorganic arsenic in water.				
Footnote **k** is not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.				

~~*(3-31-22)*~~( )

02. Factors for Calculating Hardness Dependent Metals Criteria. Hardness dependent metals criteria are calculated using values from the following table in the equations: (3-31-22)

a. CMC=WER exp{mA[ln(hardness)]+bA} X Acute Conversion Factor. (3-31-22)

b. CCC=WER exp{mc[ln(hardness)]+bc} X Chronic Conversion Factor.

Metal	mA	bA	mc	bc	aAcute Conversion Factor	aChronic Conversion Factor
Arsenic	b	b	b	b	1.0	1.0
Cadmium	0.8367	-3.560	0.6247	-3.344	0.944 see footnote a	0.909
Chromium (III)	0.819	3.7256	0.8190	0.6848	0.316	0.860
Chromium (VI)	b	b	b	b	0.982	0.962
Lead	1.273	-1.460	1.273	-4.705	0.791	0.791

Mercury	b	b	b	b	0.85	0.85
Nickel	0.846	2.255	0.8460	0.0584	0.998	0.997
Silver	1.72	-6.52	c	c	0.85	c
Zinc	0.8473	0.884	0.8473	0.884	0.978	0.986

Note to table: The term "exp" represents the base e exponential function.

Footnotes to table:

a. Conversion factors (CF) are from "Stephan, C. E. 1995. Derivation of conversion factors for the calculation of dissolved freshwater aquatic life criteria for metals. U.S. Environmental Protection Agency, Environmental Research Laboratory – Duluth." The conversion factors for cadmium and lead are hardness-dependent and can be calculated for any hardness (see limitations in Subsection 210.03.b.i.) using the following equations. For comparative purposes, the conversion factors for a total hardness of one hundred (100) mg/L are shown in the table. The conversion factor shall not exceed one (1).

Cadmium

Acute: CF=1.136672–[(ln hardness)(0.041838)] NOTE: The cadmium acute criterion equation was derived from dissolved metals toxicity data and thus requires no conversion; this conversion factor may be used to back calculate an equivalent total recoverable concentration.

Chronic: CF=1.101672–[(ln hardness)(0.041838)]

Lead (Acute and Chronic): CF=1.46203–[(ln hardness)(0.145712)

b. Not applicable

c. No chronic criteria are available for silver.

(3-31-22)

03. Applicability. The criteria established in Section 210 are subject to the general rules of applicability in the same way and to the same extent as are the other numeric chemical criteria when applied to the same use classifications. Mixing zones may be applied to toxic substance criteria subject to the limitations set forth in Section 060 and set out below. (3-31-22)

a. For all waters for which the Department has determined mixing zones to be applicable, the toxic substance criteria apply at the boundary of the mixing zone(s) and beyond. Absent an authorized mixing zone, the toxic substance criteria apply throughout the waterbody including at the end of any discharge pipe, canal or other discharge point. (3-31-22)

b. Low flow design conditions. Water quality-based effluent limits and mixing zones for toxic substances shall be based on the following low flows in perennial receiving streams. Numeric chemical criteria may be exceeded in perennial streams outside any applicable mixing zone only when flows are less than these values:

Aquatic Life		Human Health	
CMC ("acute" criteria)	1Q10 or 1B3	Non-carcinogens	Harmonic mean flow
CCC ("chronic" criteria)	7Q10 or 4B3	Carcinogens	Harmonic mean flow

(3-31-22)

i. Where "1Q10" is the lowest one-day flow with an average recurrence frequency of once in ten (10) years determined hydrologically; (3-31-22)

ii. Where "1B3" is biologically based and indicates an allowable exceedance of once every three (3) years. It may be determined by EPA's computerized method (DFLOW model); (3-31-22)

iii. Where "7Q10" is the lowest average seven (7) consecutive day low flow with an average recurrence frequency of once in ten (10) years determined hydrologically; (3-31-22)

iv. Where "4B3" is biologically based and indicates an allowable exceedance for four (4) consecutive days once every three (3) years. It may be determined by EPA's computerized method (DFLOW model); (3-31-22)

v. Where the harmonic mean flow is a long term mean flow value calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows. (3-31-22)

c. Application of aquatic life metals criteria. (3-31-22)

i. For metals other than cadmium, for purposes of calculating hardness dependent aquatic life criteria from the equations in Subsection 210.02, the minimum hardness allowed for use in those equations shall not be less than twenty-five (25) mg/l, as calcium carbonate, even if the actual ambient hardness is less than twenty-five (25) mg/l as calcium carbonate. For cadmium, the minimum hardness for use in those equations shall not be less than ten (10) mg/l, as calcium carbonate. The maximum hardness allowed for use in those equations shall not be greater than four hundred (400) mg/l, as calcium carbonate, except as specified in Subsections 210.03.c.ii. and 210.03.c.iii., even if the actual ambient hardness is greater than four hundred (400) mg/l as calcium carbonate. (3-31-22)

ii. The hardness values used for calculating aquatic life criteria for metals at design discharge conditions shall be representative of the ambient hardnesses for a receiving water that occur at the design discharge conditions given in Subsection 210.03.b. (3-31-22)

iii. Except as otherwise noted, the aquatic life criteria for metals (arsenic through zinc in Table 1 in Subsection 210.01) are expressed as dissolved metal concentrations. Unless otherwise specified by the Department, dissolved concentrations are considered to be concentrations recovered from a sample which has passed through a forty-five hundredths (0.45) micron filter. For the purposes of calculating aquatic life criteria for metals from the equations in footnotes c. and f. in Table 1 in Subsection 210.01, the water effect ratio is computed as a specific pollutant's acute or chronic toxicity values measured in water from the site covered by the standard, divided by the respective acute or chronic toxicity value in laboratory dilution water. The water-effect ratio shall be assigned a value of one (1.0), except where the Department assigns a different value that protects the designated uses of the water body from the toxic effects of the pollutant, and is derived from suitable tests on sampled water representative of conditions in the affected water body, consistent with the design discharge conditions established in Subsection 210.03.b. For purposes of calculating water effects ratios, the term acute toxicity value is the toxicity test results, such as the concentration lethal one-half (1/2) of the test organisms (i.e., LC5O) after ninety-six (96) hours of exposure (e.g., fish toxicity tests) or the effect concentration to one-half of the test organisms, (i.e., EC5O) after forty-eight (48) hours of exposure (e.g., daphnia toxicity tests). For purposes of calculating water effects ratios, the term chronic value is the result from appropriate hypothesis testing or regression analysis of measurements of growth, reproduction, or survival from life cycle, partial life cycle, or early life stage tests. The determination of acute and chronic values shall be according to current standard protocols (e.g., those published by the American Society for Testing and Materials (ASTM)) or other comparable methods. For calculation of criteria using site-specific values for both the hardness and the water effect ratio, the hardness used in the equations in Subsection 210.02 shall be as required in Subsection 210.03.c.ii. Water hardness shall be calculated from the measured calcium and magnesium ions present, and the ratio of calcium to magnesium shall be approximately the same in laboratory toxicity testing water as in the site water, or be similar to average ratios of laboratory waters used to derive the criteria. (3-31-22)

iv. Implementation Guidance for the Idaho Mercury Water Quality Criteria. (3-31-22)

(1) The "Implementation Guidance for the Idaho Mercury Water Quality Criteria" describes in detail suggested methods for discharge related monitoring requirements, calculation of reasonable potential to exceed (RPTE) water quality criteria in determining need for mercury effluent limits, and use of fish tissue mercury data in calculating mercury load reductions. This guidance, or its updates, will provide assistance to the Department and the public when implementing the methylmercury criterion. The "Implementation Guidance for the Idaho Mercury Water Quality Criteria" also provides basic background information on mercury in the environment, the novelty of a fish tissue criterion for water quality, the connection between human health and aquatic life protection, and the relation of environmental programs outside of Clean Water Act programs to reducing mercury contamination of the environment. The "Implementation Guidance for the Idaho Mercury Water Quality Criteria" is available at the

Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706, and on the DEQ website at https://www.deq.idaho.gov. (3-31-22)

(2) The implementation of a fish tissue criterion in NPDES permits and TMDLs requires a non-traditional approach, as the basic criterion is not a concentration in water. In applying the methylmercury fish tissue criterion in the context of NPDES effluent limits and TMDL load reductions, the Department will assume change in fish tissue concentrations of methylmercury are proportional to change in water body loading of total mercury. Reasonable potential to exceed (RPTE) the fish tissue criterion for existing NPDES sources will be based on measured fish tissue concentrations potentially affected by the discharge exceeding a specified threshold value, based on uncertainty due to measurement variability. This threshold value is also used for TMDL decisions. Because measured fish tissue concentrations do not reflect the effect of proposed new or increased discharge of mercury, RPTE in these cases will be based upon an estimated fish tissue methylmercury concentration, using projected changes in waterbody loading of total mercury and a proportional response in fish tissue mercury. For the above purposes, mercury will be measured in the skinless filets of sport fish using techniques capable of detecting tissue concentrations down to point zero five (0.05) mg/kg. Total mercury analysis may be used, but will be assumed to be all methylmercury for purposes of implementing the criterion. (3-31-22)

v. Copper Criteria for Aquatic Life. (3-31-22)

(1) Aquatic life criteria for copper shall be derived using: (3-31-22)

(a) Biotic Ligand Model (BLM) software that calculates criteria consistent with the "Aquatic Life Ambient Freshwater Quality Criteria – Copper": EPA-822-R-07-001 (February 2007); or (3-31-22)

(b) An estimate derived from BLM outputs that is based on a scientifically sound method and protective of the designated aquatic life use. (3-31-22)

(2) To calculate copper criteria using the BLM, the following parameters from each site shall be used: temperature, pH, dissolved organic carbon (DOC), calcium, magnesium, sodium, potassium, sulfate, chloride, and alkalinity. The BLM inputs for humic acid (HA) as a proportion of DOC and sulfide shall be based on either measured values or the following default values: 10% HA as a proportion of DOC, 1.00×10^{-8} mg/L sulfide. Measured values shall supersede any estimate or default input. (3-31-22)

(3) BLM input measurements shall be planned to capture the most bioavailable conditions for copper. (3-31-22)

(4) A criterion derived under Subsection 210.03.c.v.(1)(a) shall supersede any criterion derived under Subsection 210.03.c.v.(1)(b). Acceptable BLM software includes the "US EPA WQC Calculation" for copper in BLM Version 3.1.2.37 (October 2015). (3-31-22)

(5) Implementation Guidance for the Idaho Copper Criteria for Aquatic Life. The "Implementation Guidance for the Idaho Copper Criteria for Aquatic Life: Using the Biotic Ligand Model" describes in detail methods for implementing the aquatic life criteria for copper using the BLM. This guidance, or its updates, will provide assistance to the Department and the public for determining minimum data requirements for BLM inputs and how to estimate criteria when data are incomplete or unavailable. The "Implementation Guidance for the Idaho Copper Criteria for Aquatic Life: Using the Biotic Ligand Model" is available at the Department of Environmental Quality, 1410 N. Hilton, Boise, Idaho 83706, and on the DEQ website at https://www.deq.idaho.gov. (3-31-22)

d. Application of toxics criteria. (3-31-22)

i. Frequency and duration for aquatic life toxics criteria. CMC column criteria in Table 1 in Subsection 210.01 are concentrations not to be exceeded for a one-hour average more than once in three (3) years unless otherwise specified. CCC column criteria in Table 1 in Subsection 210.01 are concentrations not to be exceeded for a four-day average more than once in three (3) years unless otherwise specified. (3-31-22)

ii. Frequency and duration for human health toxics criteria. Criteria in Table 2 in Subsection 210.01 are not to be exceeded based on an annual harmonic mean. (3-31-22)

Effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

ii. Frequency and duration for human health toxics criteria. Criteria in Table 2 ~~*in*~~, Subsection 210.01, are not to be exceeded based on an annual ~~*harmonic*~~ arithmetic mean concentration. ~~*(3-31-22)*~~( )

Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

e. Application of the fish tissue element of the arsenic criterion for human health. ( )

i. The fish tissue element for total recoverable inorganic arsenic is based on a single measurement using sufficiently sensitive methods. ( )

ii. The single measurement must be made on a sample that is an average or composite of a minimum of five (5) individual fish of the same species collected from the same water body within the same calendar year. *When available, game fish species representative of the size and species that may be legally harvested within the waterbody are preferred.* Results from multiple sample events may be averaged or composited provided they represent the same species collected from the same water body within the same calendar year. ( )

iii. Not to be exceeded; the Department will evaluate all representative fish tissue data to determine compliance with this criterion element. ( )

iv. *For purposes of determining water column targets for the development of effluent limits, TMDL targets, or water column targets for fishless waters, t*he fish tissue element may be translated to a water column value using a site-specific bioaccumulation factor (BAF) based on the ratio of total recoverable inorganic arsenic in fish muscle or fillet tissue to dissolved inorganic arsenic in the water column using the following equation:

$$WC_T\ (\mu g/L) = \frac{8.00\ \mu g/kg}{BAF_{SS}\ L/kg}$$

Where:

WC_T (µg/L) is the translated water column value; and

BAF_{SS} L/kg is the site specific BAF calculated consistent with 210.03.e.v.

In fishless waters, surface water and fish tissue from the immediate downstream waters may be used for bioaccumulation modeling. In the absence of sufficient fish tissue data, the water column element is the applicable criterion element in fishless waters. ( )

v. When translating the fish tissue element to a water column value, the following procedures will be followed. ( )

(1) Data used to translate the fish tissue element must be based on current conditions and consistent with Subsections 210.03.e.i. and ii. ( )

(2) *Whenever practical, f*ish tissue samples must be representative of the *game* fish species present within the waterbody and include game fish *of legally harvestable size*. In the absence of suitable game fish species, other resident fish species may be used. ( )

(3) Water column samples must be representative of the annual average concentration of dissolved inorganic arsenic at the site. ( )

(4) BAFs are calculated as a trophic-level weighted BAF or other scientifically defensible method for deriving protective BAF. ( )

Subsection 210.03.e. is not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

04. National Pollutant Discharge Elimination System Permitting. For the purposes of NPDES permitting, interpretation and implementation of metals criteria listed in Subsection 210.02 should be governed by the following standards, that are hereby incorporated by reference, in addition to other scientifically defensible methods deemed appropriate by the Department; provided, however, any identified conversion factors within these documents are not incorporated by reference. Metals criteria conversion factors are identified in Subsection 210.02 of this rule. (3-31-22)

a. "Guidance Document on Dissolved Criteria -- Expression of Aquatic Life Criteria," EPA, October 1993. (3-31-22)

b. "Guidance Document on Dynamic Modeling and Translators," EPA, August 1993. (3-31-22)

c. "Guidance Document on Clean Analytical Techniques and Monitoring," EPA, October 1993. (3-31-22)

d. "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals," EPA, February 1994. (3-31-22)

e. "Technical Support Document for Water Quality-Based Toxics Control." EPA, March 1991. (3-31-22)

05. Development of Toxic Substance Criteria. (3-31-22)

a. Aquatic Life Communities Criteria. Numeric criteria for the protection of aquatic life uses not identified in these rules for toxic substances, may be derived by the Department from the following information: (3-31-22)

i. Site-specific criteria developed pursuant to Section 275; (3-31-22)

ii. Effluent biomonitoring, toxicity testing and whole-effluent toxicity determinations; (3-31-22)

iii. The most recent recommended criteria defined in EPA's ECOTOX database. When using EPA recommended criteria to derive water quality criteria to protect aquatic life uses, the lowest observed effect concentrations (LOECs) shall be considered; or (3-31-22)

iv. Scientific studies including, but not limited to, instream benthic assessment or rapid bioassessment. (3-31-22)

b. Human Health Criteria. (3-31-22)

i. When numeric criteria for the protection of human health are not identified in these rules for toxic substances, quantifiable criteria may be derived by the Department using best available science on toxicity thresholds (i.e. reference dose or cancer slope factor), such as defined in EPA's Integrated Risk Information System (IRIS) or other peer-reviewed source acceptable to the Department. (3-31-22)

ii. When using toxicity thresholds to derive water quality criteria to protect human health, a fish consumption rate representative of the population to be protected, a mean adult body weight, an adult 90th percentile water ingestion rate, a trophic level weighted BAF or BCF, and a hazard quotient of one (1) for non-carcinogens or a cancer risk level of 10^{-5} for carcinogens shall be utilized. (3-31-22)

Effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

ii. When using toxicity thresholds to derive water quality criteria to protect human health, a fish consumption rate representative of the population to be protected, a mean adult body weight, an adult 90th percentile water ingestion rate, a trophic level weighted BAF or BCF, and a hazard quotient of one (1) for non-carcinogens or a cancer risk level of 10^{-5} for carcinogens ~~*shall*~~ will be utilized for any compound not listed in Subsection 210.05.b.iii. ~~*(3-31-22)*~~( )

Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

iii. Subsection 210.05.b.ii. does not apply to the fish tissue element for inorganic arsenic. ( )

Not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-2201 have been approved.

IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.05 – RULES AND STANDARDS FOR HAZARDOUS WASTE

DOCKET NO. 58-0105-2201

NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

LINK: LSO Rules Analysis Memo and Incorporation By Reference Synopsis (IBRS)

EFFECTIVE DATE: This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2023 Idaho State Legislature for final approval. The pending rule will become final and effective upon the adjournment sine die of the First Regular Session of the Sixty-seventh Idaho Legislature unless the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

AUTHORITY: In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Chapters 44 and 58, Title 39, Idaho Code. In addition, 40 CFR 271.21(e) and Section 39-4404, Idaho Code, require DEQ to adopt amendments to federal law as proposed under this docket.

DESCRIPTIVE SUMMARY: A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, September 7, 2022, Vol. 22-9, pages 489 through 490. DEQ received no comments, and the rule has been adopted as initially proposed. The board meeting documents are available at https://www.deq.idaho.gov/hazardous-waste-docket-no-58-0105-2201/ or by contacting the undersigned.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 7th day of December, 2022.

Caroline Moores
Operations Senior Analyst
Department of Environmental Quality
1410 N. Hilton Street
Boise, Idaho 83706
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THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE

AUTHORITY: In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Chapters 44 and 58, Title 39, Idaho Code. In addition, 40 CFR 271.21(e) and Section 39-4404, Idaho Code, require DEQ to adopt amendments to federal law as proposed under this docket.

PUBLIC HEARING SCHEDULE: No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before September 21, 2022. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: The following is a nontechnical explanation of the substance and purpose of the proposed rulemaking: The purpose of this rulemaking is to ensure that the state rules remain consistent with federal regulations. Idaho's Rules and Standards for Hazardous Waste, IDAPA 58.01.05, are updated annually to maintain consistency with the federal regulations implementing the Resource Conservation and Recovery Act (RCRA) as directed by the Idaho Hazardous Waste Management Act (HWMA). This proposed rule updates federal regulations incorporated by reference with the July 1, 2022 Code of Federal Regulations (CFR) effective date. The July 1, 2022 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2022.

Citizens of the state of Idaho; environmental groups; persons interested in hazardous waste; and hazardous waste generators, transporters, and treatment, storage, and disposal facilities may be interested in commenting on this proposed rule. The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed. After consideration of public comments, DEQ intends to present the final proposal to the Idaho Board of Environmental Quality in November 2022 for adoption of a pending rule. The rule is expected to be final and effective upon the conclusion of the 2023 legislative session if adopted by the Board and approved by the Idaho Legislature.

INCORPORATION BY REFERENCE: Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

Adoption of federal regulations is necessary to maintain program primacy. Incorporation by reference allows DEQ to keep its rules up to date with federal regulation changes and simplifies compliance for the regulated community. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive difference between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference can be obtained at https://www.deq.idaho.gov/hazardous-waste-docket-no-58-0105-2201/.

NEGOTIATED RULEMAKING: Negotiated rulemaking was not conducted. DEQ determined that negotiated rulemaking is not feasible pursuant to Section 67-5220, Idaho Code, due to the simple nature of this rulemaking and because DEQ has no discretion with respect to adopting EPA's federal regulations implementing the Resource Conservation and Recovery Act (RCRA) as directed by the Idaho Hazardous Waste Management Act (HWMA). Whenever possible, DEQ incorporates federal regulations by reference to ensure that the state rules are consistent with federal regulations.

IDAHO CODE SECTION 39-107D STATEMENT: This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

FISCAL IMPACT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year resulting from this rulemaking:

Not applicable

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning the proposed rule, contact Albert Crawshaw at albert.crawshaw@deq.idaho.gov or (208) 373-0554.

SUBMISSION OF WRITTEN COMMENTS: Anyone may submit written comments regarding this proposed rulemaking. The Department will consider all comments received on or before September 28, 2022. Submit comments to:

Albert Crawshaw
Department of Environmental Quality
1410 N. Hilton Street
Boise, Idaho 83706
albert.crawshaw@deq.idaho.gov

DATED this September 7, 2022

THE FOLLOWING IS THE TEXT OF DOCKET NO. 58-0105-2201

002. INCORPORATION BY REFERENCE OF FEDERAL REGULATIONS.
Any reference in these rules to requirements, procedures, or specific forms contained in the Code of Federal Regulations (CFR), Title 40, Parts 124, 260 - 268, 270, 273, 278, and 279 constitute the full adoption by reference of that part and Subparts as they appear in 40 CFR, revised as of July 1, 202~~1~~2, including any notes and appendices therein, unless expressly provided otherwise in these rules. ~~(3-24-22)~~( )

01. Exceptions. Nothing in 40 CFR Parts 260 - 268, 270, 273, 278, 279 or Part 124 as pertains to permits for Underground Injection Control (U.I.C.) under the Safe Drinking Water Act, the Dredge or Fill Program under Section 404 of the Clean Water Act, the National Pollution Discharge Elimination System (NPDES) under the Clean Water Act or Prevention of Significant Deterioration Program (PSD) under the Clean Air Act is adopted or included by reference herein. (3-24-22)

02. Availability of Referenced Material. The federal regulations adopted by reference throughout these rules are maintained at the following locations: (3-24-22)

a. U.S. Government Printing Office, ~~*http://www.ecfr.gov/cgi-bin/ECFR*~~ https://www.ecfr.gov/current/title-40; ~~(3-24-22)~~( )

b. State Law Library, 451 W. State Street, P.O. Box 83720, Boise, ID 83720-0051, (208) 334-3316; and (3-24-22)

c. Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208) 373-0502. (3-24-22)

IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.17 – RECYCLED WATER RULES

DOCKET NO. 58-0117-2201 (ZBR CHAPTER REWRITE)

NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

LINK: LSO Rules Analysis Memo

EFFECTIVE DATE: This rule has been adopted by the Idaho Board of Environmental Quality (Board) and is now pending review by the 2023 Idaho State Legislature for final approval. The pending rule will become final and effective upon the adjournment sine die of the First Regular Session of the Sixty-seventh Idaho Legislature unless the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

AUTHORITY: In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Chapter 1, Title 39, Idaho Code.

DESCRIPTIVE SUMMARY: A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, September 7, 2022, Vol. 22-9, pages 491 through 515.

After consideration of public comments, Subsection 100.01.a. has been revised. The remainder of the rule has been adopted as initially proposed. The board meeting documents are available at https://www.deq.idaho.gov/recycled-water-docket-no-58-0117-2201/ or by contacting the undersigned.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning the rulemaking, contact the undersigned.

Dated this 7th day of December, 2022

Caroline Moores
Operations Senior Analyst
Department of Environmental Quality
1410 N. Hilton Street
Boise, Idaho 83706
Phone: (208)373-0149
caroline.moores@deq.idaho.gov

THE FOLLOWING NOTICE PUBLISHED WITH THE PROPOSED RULE

AUTHORITY: In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Chapter 1, Title 39, Idaho Code.

PUBLIC HEARING SCHEDULE: No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before September 21, 2022. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: DEQ initiated this rulemaking in compliance with Executive Order No. 2020-01, Zero-Based Regulation (EO 2020-01), issued by Governor Little on January 16, 2020. Pursuant to EO 2020-01, each rule chapter effective on June 30, 2020, shall be reviewed by the agency that promulgated the rule. The review will be conducted according to a schedule established by the Division of Financial Management, Office of the Governor (DFM), posted at https://adminrules.idaho.gov/forms_menu.html. This is one of the DEQ rule chapters up for review in 2022.

The goal of the rulemaking is to perform a critical and comprehensive review of the entire chapter in an attempt to reduce overall regulatory burden, streamline various provisions, and increase clarity and ease of use.

This rulemaking also includes provisions that will allow DEQ to issue general reuse permits. General permits will be issued for specific but common uses of recycled water that need less DEQ oversight due to the nature and/or volume of the recycled water. General reuse permits will reduce the permitting process for certain uses of recycled water while still being protective of human health and the environment.

Because this is the promulgation of a new rule chapter, the proposed rule does not contain strike-out/underline text. A document prepared by DEQ showing the proposed rule revisions in strike-out/underline format can be viewed here.

Citizens of the state of Idaho, environmental groups, and owners and operators of recycled water facilities may be interested in commenting on this proposed rule. After consideration of public comments, DEQ intends to present the final proposal to the Idaho Board of Environmental Quality (Board) in November 2022 for adoption of a pending rule. The rule is expected to be final and effective upon the conclusion of the 2023 legislative session if adopted by the Board and approved by the Idaho Legislature.

NEGOTIATED RULEMAKING: On April 6, 2022, the notice of negotiated rulemaking was published in the Idaho Administrative Bulletin, and on April 20, 2022, a preliminary draft rule was posted on DEQ's website. Meetings were held on May 4 and June 7, 2022. Stakeholders and members of the public participated by receiving email notifications, attending the meetings, reviewing DEQ's presentations, and submitting comments. Key information was posted on DEQ's website and distributed to persons who participated in the negotiated rulemaking.

All comments received during the negotiated rulemaking process were considered by DEQ when making decisions regarding the development of the rule. At the conclusion of the negotiated rulemaking process, DEQ submitted the draft rule to DFM for review. DEQ formatted the draft for publication as a proposed rule and is now seeking public comment. The negotiated rulemaking record, which includes the negotiated rule drafts, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at https://www.deq.idaho.gov/recycled-water-docket-no-58-0117-2201/.

INCORPORATION BY REFERENCE: Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: Not applicable.

IDAHO CODE SECTION 39-107D STATEMENT: IDAPA 58.01.17, Recycled Water Rules, ensure that the permitted use of recycled water does not harm human health and the environment or violate the Department's Water Quality Standards, IDAPA 58.01.02, or the Ground Water Quality Rule, IDAPA 58.01.11. The federal government does not regulate or permit the use of recycled water. The statutory authority for these rules is contained in Idaho Code §§ 39-102, 39-105, 39-115 and 39-118. Idaho Code § 39-115 provides the Director with the authority to issue pollution source permits in compliance with rules. Idaho Code § 39-118 requires all plans and specifications and record plans "for the construction of new sewage systems, sewage treatment plants or systems" to "be submitted to

and approved by the director before construction may begin, and all construction shall be in substantial compliance therewith." Idaho Code § 39-105(2) requires the Director to "formulate and recommend to the board rules as may be necessary to deal with problems related to water pollution...and licensure and certification requirements pertinent thereto." Idaho Code § 39-102(3)(a) states: "It is the policy of the state to prevent contamination of ground water from any source to the maximum extent practical."

Most of the substantive provisions of these rules were adopted after 2003, thus, if they were based on science or included a standard necessary to protect human health and the environment, they have already been approved as meeting Idaho Code §§ 39-107D(2) and (3) requirements. The remaining provisions are not specific science-based requirements or standards. Rather, they are (1) procedural requirements that are primarily necessary for the Department to properly process reuse permits, or (2) construction-related requirements to ensure land application does not harm human health and the environment or violate Water Quality Standards or the Ground Water Quality Rule.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning this proposed rulemaking, contact Matt Plaisted at matthew.plaisted@deq.idaho.gov, (208)373-0151.

SUBMISSION OF WRITTEN COMMENTS: Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before September 28, 2022. Submit comments to:

Matt Plaisted
Wastewater Engineering Bureau Chief
Department of Environmental Quality
1410 N. Hilton Street
Boise, Idaho 83706
matthew.plaisted@deq.idaho.gov

Dated this 7th day of September, 2022.

Substantive changes have been made to the pending rule.
Italicized red text **indicates changes between the text of the proposed rule as adopted in the pending rule.**

THE FOLLOWING IS THE TEXT OF ZBR DOCKET NO. 58-0117-2201

58.01.17 – RECYCLED WATER RULES

000. LEGAL AUTHORITY.
Pursuant to Title 39, Chapter 1, Idaho Code, the Department of Environmental Quality is authorized to adopt or formulate and recommend to the Board of Environmental Quality (Board), and the Board is authorized to adopt, rules to protect the environment and the health of citizens of the state, including provisions for issuing pollution source permits, authorized by Section 39-115, Idaho Code, and reviewing plans and specifications for wastewater treatment

facilities, authorized by Section 39-118, Idaho Code. ( )

001. TITLE AND SCOPE.

01. Title. These rules are titled IDAPA 58.01.17, "Recycled Water Rules." ( )

02. Scope. These rules establish the procedures and requirements to issue and maintain pollution source permits for reuse facilities, referred to as "reuse permits." ( )

002. ADMINISTRATIVE PROVISIONS.
Persons may be entitled to appeal agency actions authorized under these rules pursuant to IDAPA 58.01.23, Contested Case Rules and Rules for Protection and Disclosure of Records. ( )

003. (RESERVED)

004. REFERENCED MATERIALS.

01. Idaho Guidance for Recycled Water. This document, and subsequent revisions, assist with applying and interpreting these rules. Review this document at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706, or online at http://www.deq.idaho.gov/guidance-documents. ( )

02. Treatment Technology Report for Recycled Water. The Alternative Treatment Technology Report for Recycled Water. ( )

03. Recommended Standards for Wastewater Facilities. Recommended Standards for Wastewater Facilities - Great Lakes-Upper Mississippi River Board of State Sanitary Engineers, most current version, at http://10statesstandards.com/wastewaterstandards.html. ( )

04. AWWA Manual M24. AWWA Manual M24, Chapter 4 for Dual Water Systems, 4th edition. Review this document at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208) 373-0502, or it can be purchased from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, (800) 926-7337. ( )

05. Idaho Standards for Public Works Construction. Purchase this document through the Local Highway Technical Assistance Council (LHTAC), 3330 Grace Street, Boise, ID, 83703, (208) 344-0565. ( )

06. American Water Works Association (AWWA) Standards. Review this document at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, (208)373-0502, or it can be purchased from the AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235, (800) 926-7337. ( )

005. – 009. (RESERVED)

010. DEFINITIONS.
The terms "department," "person," and "waters" have the meaning provided for those terms in Section 39-103, Idaho Code. ( )

01. Beneficial Use. Uses of the water of Idaho including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics. The beneficial use depends upon actual use, ability of the water to support a non-existing use either now or in the future, and its likelihood of being used in a given manner. The use of water for wastewater dilution or as a receiving water for a waste treatment facility effluent is not a beneficial use. ( )

02. Biochemical Oxygen Demand (BOD). Amount of oxygen necessary to satisfy the biochemical oxidation requirements of the organic materials at the time the sample is collected; unless otherwise specified, this term means the five (5) day BOD (BOD5). ( )

03. Buffer Distances. Specified distance between an actual point of recycled water use and a land

feature or resource use, such as wells, adjoining property, inhabited dwellings, or other features. ( )

04. Ground Water Recharge. Process of adding recycled water to the zone of saturation. ( )

05. Industrial Wastewater. All wastewater, treated or untreated, that is not defined as municipal wastewater. ( )

06. Land Application. Process of distributing wastewater or recycled water to the land surface. ( )

07. Landscape Impoundment. Any lake, pond, or other water-holding feature constructed or managed to store recycled water where swimming, wading, boating, fishing, and other water-based recreational activities are prohibited. Landscape impoundment created for storage may incidentally serve a landscaping or aesthetic purpose. ( )

08. Maximum Day Flow. Largest volume of flow received during a 24-hour period expressed as a volume per unit time. ( )

09. Modal Contact Time. Amount of time elapsed between the time a tracer, such as salt or dye, is injected into the influent at the entrance to a chamber and the time the highest concentration of the tracer is observed in the effluent from the chamber. ( )

10. Municipal Wastewater. Wastewater containing sewage and associated solids, whether treated or untreated. Municipal wastewater, also known as domestic wastewater, may contain industrial wastewater. ( )

11. Non-Potable Mains. Pipelines that collect and/or convey non-potable discharges from or to multiple service connections. Examples include sewage collection and interceptor mains, storm sewers, non-potable irrigation mains, and recycled water mains. ( )

12. Non-Potable Services. Pipelines that convey non-potable discharges from individual facilities to a connection with the non-potable main. Term also refers to pipelines that convey non-potable water from a pressurized irrigation system, recycled water system, and other non-potable systems to individual consumers. ( )

13. Non-Potable Water. Any fluids that do not meet the definition of potable water. ( )

14. Nephelometric Turbidity Unit (NTU). Measure of turbidity that compares the intensity of the light scattered by the sample under defined conditions with the intensity of the light scattered by a standard reference suspension under the same conditions. ( )

15. Peak Hour Flow. Largest volume of flow received during a one (1) hour period expressed as a volume per unit time. ( )

16. Plan of Operation. Manual that describes in detail the current operation, maintenance, and management of a reuse facility. ( )

17. Point of Compliance. Point in the reuse facility where the recycled water must meet the requirements of the permit. A permit may require more than one (1) point of compliance within the facility depending on the constituents to be monitored. ( )

18. Potable Water. Water used by humans for drinking, bathing for purposes of personal hygiene (including hand-washing), showering, cooking, dishwashing, and maintaining oral hygiene. In common usage, the terms “culinary water,” “drinking water,” and “potable water” are frequently used as synonyms. ( )

19. Purple. For the purposes of these rules, purple is specified as Pantone 512, 522, or equivalent. ( )

20. Rapid Infiltration System. Permeable systems designed and operated for high rates of recycled water infiltration followed by rapid percolation using wetting and drying cycles. ( )

21. **Recycled Water**. Water treated by a wastewater treatment system and used according to these rules. ( )

22. **Restricted Public Access**. Preventing public entry within the area or a facility's point of reuse and the buffer distance around the area by site location or physical structures such as fencing. ( )

23. **Reuse**. Use of recycled water or wastewater for beneficial purposes including irrigation, ground water recharge, landscape impoundments, toilet flushing in commercial buildings, dust control, and other uses. Also referred to as Beneficial Reuse. ( )

24. **Reuse Facility or Facility**. Structure or system designed or used for reuse of municipal or industrial wastewater including, but not limited to, industrial and municipal wastewater treatment facilities, pumping and storage facilities, pipeline and distribution facilities, and the property to which the wastewater or recycled water is used. Does not include industrial in-plant processes and reuse of process waters within the plant. ( )

25. **Sewage**. Water-carried human wastes from residences, buildings, and industrial establishments and other places, together with ground water infiltration and surface water as may be present. ( )

26. **Subsurface Distribution System**. System with a point of discharge beneath the earth's surface. ( )

27. **Turbidity**. Measure of the interference of light passage through water, or visual depth restriction from the presence of suspended matter such as clay, silt, nonliving organic particulates, plankton, and other microscopic organisms. Operationally, turbidity measurements are expressions of certain light-scattering and absorbing properties of a water sample. Turbidity is measured by the nephelometric method. ( )

28. **Wastewater**. Combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions, and other establishments, together with any ground water, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, gray water, or commercial or industrial pollutants; and sewage. ( )

011. – 099. **(RESERVED)**

100. **APPLICABILITY.**

01. **Applicability to Reuse Facilities**. All reuse facilities are subject to these rules except: ( )

a. Land application of wastewater from mining, livestock truck washing facilities, feedlots, dairies, and digesters where the digestate is applied according to *the originating dairy's* Idaho Department of Agriculture approved nutrient management plan; *( )*

b. Recycled water used for landscape irrigation at a municipal wastewater treatment plant if: ( )

i. No other recycled water use would subject the municipal wastewater treatment plant to these rules; ( )

ii. The municipal wastewater treatment plant has, and is in compliance with, an IPDES permit; and ( )

iii. Public access to the area of landscape irrigation is restricted; and ( )

c. Other facilities identified by the Department, if covered adequately by other law. ( )

02. **Reuse Policy**. Department policy promotes, where appropriate, reuse of both municipal and industrial recycled water. ( )

101. – 299. (RESERVED)

300. PERMIT REQUIREMENTS AND APPLICATION.

01. Permit. No person may operate or continue to operate a reuse facility without a valid permit issued by the Department as provided in these rules. A permit does not relieve any person from meeting all applicable local, state, and federal laws. ( )

02. Pre-Application Conference. New applicants must meet with the Department to discuss the application process before submitting an application. ( )

03. Application Contents. Except as provided in Subsection 300.04, the following must be included in the application: ( )

a. Name, location, and mailing address of the facility; ( )

b. Name, mailing address, and phone number of the facility owner and signature of the owner or authorized agent; ( )

c. Nature and identification of the entities or persons owning the facility, facility components, and related real property; ( )

d. List of local, state, and federal permits, licenses, and approvals related to the activities applied for and the dates of application or approval and receipt; ( )

e. Topographic map of the facility site showing the location and extent of: ( )

i. Wastewater inlets, outlets, and storage structures and facilities, including the reuse area; ( )

ii. Wells, springs, wetlands, and surface waters; ( )

iii. Twenty-five (25), fifty (50), and one hundred (100) year flood plains, as available through the Federal Insurance Administration of the Federal Emergency Management Agency or through other sources acceptable to the Department; ( )

iv. Service roads; ( )

v. Natural or man-made features necessary for treatment; ( )

vi. Buildings and structures; and ( )

vii. Process chemicals and residue storage facilities. ( )

f. Topographic map that may be separate from or combined with the facility site map, extending one quarter (1/4) mile beyond the outer limits of the facility site, and showing the location and extent of the following: ( )

i. Wells, springs, wetlands, and surface waters; ( )

ii. Public and private drinking water supply sources and source water assessment areas (public water system protection area information); ( )

iii. Public roads; and ( )

iv. Dwellings and private and public gathering places. ( )

g. If the facility site or any portion thereof is not owned by the permittee, a copy of related agreements that allow the permittee access or use; ( )

h. Sources and volume of wastewaters to be treated; ( )

i. Physical, chemical, and biological characteristics of the recycled water to be used; ( )

j. Climatic, hydrogeologic, and soil characteristics of the facility site; ( )

k. Description of treatment process and alternatives for disposal of unanticipated excess recycled water that does not meet class specifications; ( )

l. Site management plans, including a cropping plan where applicable; ( )

m. Statement and supporting documentation demonstrating the proposed activity will comply with IDAPA 58.01.11, "Ground Water Quality Rule"; and ( )

n. Other information as requested by the Department to issue the permit. The Permitting Guidance for Recycled Water assists applicants with obtaining a reuse permit and the Department in determining the need for other information. ( )

04. Exceptions. Application content for permits will be clarified at the pre-application conference and may result in the omission of one (1) or more of the items listed in Subsection 300.03. ( )

05. Reuse Facility Plan of Operation. A plan of operation must contain, as applicable, operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, reuse area site maps, wastewater and recycled water characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, and an emergency operating plan. Permittees are required to submit a plan of operation for review and approval. Amendments are also subject to review and approval. ( )

301. – 399. (RESERVED)

400. APPLICATION PROCESSING.

01. Submittal. New facilities must submit applications at least one hundred eighty (180) days before beginning reuse activities. Existing facilities applying for permit renewals must submit an application at least one hundred eighty (180) days before the existing permit expires. ( )

02. Completeness. ( )

a. If the Department determines the application is complete, the Department will provide written notice to the applicant within thirty (30) days after receiving the application, specifying the effective date of application. ( )

b. After the application is complete, the Department or applicant may initiate a consultation to clarify, modify, or supplement the application. ( )

c. If the application is incomplete, the Department will provide written notice to the applicant within thirty (30) days after receiving the application, specifying the deficiencies and requesting additional information. The Department will not process an application until it is complete according to these rules. ( )

03. Preliminary Decision/Application Denial. Within thirty (30) days of the effective date of the application, the Department will issue a written preliminary decision to prepare a draft permit or a written decision denying the application. ( )

04. Staff Analysis. The staff analysis states the facts considered when preparing the draft permit conditions, or intent to deny, and summarizes the basis for draft conditions or denial with references to applicable requirements and supporting materials. The Department will provide the staff analysis with the draft permit issuance or with the written decision denying the application. ( )

05. Draft Permit. ( )

a. The Department will issue a draft permit within sixty (60) days of issuing a preliminary decision to prepare a draft permit. The draft permit specifies the conditions of operation and management necessary for issuing the permit. ( )

b. The Department will provide a public notice for the draft permit. The notice specifies the time and manner that the public may provide written comments. The Department may offer an opportunity for oral comments. ( )

06. Final Permit. The Department will issue a written final permit decision to the applicant within sixty (60) days from the issuance of the draft permit, except the Department may issue the decision at a later date in response to a written request to extend the public comment period. ( )

07. Effective Date. The final permit becomes effective upon date of issue unless a later effective date is specified in the permit. ( )

08. Expiring Permits. ( )

a. The Department may administratively extend the terms and conditions of an expired permit pursuant to Section 67-5254, Idaho Code, provided a complete permit renewal application is submitted prior to the current permit expiration. ( )

b. A permittee must operate under the terms of the administratively extended permit until a new permit is issued. ( )

401. – 499. (RESERVED)

500. STANDARD CONDITIONS.
Permit conditions will protect human health and the environment from the potential hazard of an existing or proposed wastewater treatment system. The permittee must comply with all conditions of the permit. The following conditions apply to and are included in all permits. ( )

01. Facility Operation. At all times, the permittee must properly maintain and operate all structures, systems, and equipment installed or used by the permittee for treatment, control, and monitoring to achieve compliance with the permit or these rules. ( )

02. Provide Information. If requested by the Department, the permittee must provide the Department, within a reasonable time, information including copies of records, to help the Department determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these rules. ( )

03. Entry and Access. The permittee must allow the Department, consistent with Title 39, Chapter 1, Idaho Code, to: ( )

a. Enter the permitted facility and all associated property; ( )

b. Inspect any records kept under the conditions of the permit; ( )

c. Inspect and photograph any permitted facility, equipment, practice, records, or operation; and ( )

d. Sample or monitor any substance or any parameter at the facility to ensure permit compliance. ( )

04. Reporting. The permittee must report to the Department as specified in this section. ( )

a. A written report submitted at least thirty (30) days before: ( )

i. Any planned physical or operational alteration to the permitted facility that results or would result in a significant change in information submitted during the application process. If a major permit modification is needed, the alteration cannot be made before the Department issues approval. ( )

ii. Any anticipated change that would result in noncompliance with any permit condition or these rules. ( )

b. Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance that may endanger human health and the environment at telephone numbers provided in the permit. ( )

c. A written report as soon as possible, but within five (5) days of the date the permittee knows, or should reasonably know, of any noncompliance unless extended by the Department, providing: ( )

i. Description of the noncompliance and its cause; ( )

ii. Period of noncompliance including, to the extent possible, times and dates, if the noncompliance has not been corrected, and the anticipated length of time it is expected to continue; and ( )

iii. Steps taken or planned, including timelines, to reduce or eliminate the continuance or reoccurrence of the noncompliance. ( )

d. In writing as soon as the permittee knows, or should reasonably know, of material facts not submitted or corrections to information submitted in a permit application, report, or notice provided to the Department. ( )

e. No person may knowingly make any false statement, representation, or certification in any form, notice, or report required under any permit, or any applicable rule or order in force pursuant thereto. ( )

05. Minimize Impacts. The permittee must take all necessary actions to eliminate and correct any adverse impact on human health and the environment resulting from permit noncompliance. ( )

06. Applied Waters Restricted to Premises. Wastewater or recycled water applied to the land surface must be restricted to the premises of the reuse site. ( )

07. Hazard or Nuisance Prohibited. Wastewater or recycled water must not create a public health hazard or a nuisance condition. ( )

08. Renewal. If the permittee intends to continue operating the permitted facility after the existing permit expires, the permittee must apply for a permit renewal according to these rules. ( )

501. – 599. (RESERVED)

600. SPECIFIC CONDITIONS.

01. Basis. Conditions necessary for protecting human health and the environment may differ from facility to facility because of varying environmental conditions and wastewater and recycled water compositions. The Department may establish, on a case-by-case basis, specific conditions that consider facility characteristics and inherent hazards of those characteristics, including, but not limited to: ( )

a. Chemical, biological, physical, and volumetric characteristics of the wastewater and recycled water; ( )

b. Geological and climatic nature of the facility site; ( )

c. Size of the site and its proximity to population centers and to ground and surface water; ( )

d. Legal considerations relative to land use and water rights; ( )

e. Techniques used in wastewater or recycled water distribution and the disposition of vegetation exposed to wastewater or recycled water; ( )

f. Abilities of soils and vegetative covers to treat the wastewater or recycled water without undue hazard to human health and the environment; and ( )

g. Monitoring and record keeping that determine if the facility is operated in conformance with its design and if its design is adequate to protect human health and the environment. ( )

02. Duration. A permit is effective for a fixed term of not more than ten (10) years. ( )

03. Operational Limitations. Conditions of the permit may specify or limit: ( )

a. Wastewater and recycled water composition; ( )

b. Method, manner, and frequency of wastewater treatment; ( )

c. Wastewater pretreatment requirements; ( )

d. Physical, chemical, and biological characteristics of a reuse facility; and ( )

e. Other conditions the Department finds necessary to protect human health and the environment. ( )

04. Compliance Schedules. The Department may establish a compliance schedule for facilities as part of the permit conditions including: ( )

a. Specific steps or actions necessary for the permittee to achieve compliance or final permit conditions; ( )

b. Dates by which those steps or actions are to be taken; and ( )

c. When the time period for compliance exceeds one (1) year, the schedule may also establish interim requirements and dates for achievement. ( )

05. Monitoring. Any facility may be subject to monitoring conditions including, but not limited to: ( )

a. Installation, use, and maintenance of monitoring equipment; ( )

b. Sampling methodology, frequency, and locations; ( )

c. Monitored substances or parameters; ( )

d. Testing and analytical procedures; and ( )

e. Reporting requirements including both frequency and form. ( )

601. MUNICIPAL RECYCLED WATER: CLASSIFICATION, TREATMENT, USE.

01. Class A Recycled Water. To be classified Class A recycled water, municipal wastewater must be treated using processes identified in Table 1, or an equivalent process, and adequately disinfected. Class A treatment systems are reviewed by the Department and approved on a case-by-case basis. The Department may require pilot testing or demonstration before approval, or may condition approval upon the success of testing or demonstration. ( )

a. Total Coliform. ( )

i. Recycled water must be disinfected by either: ( )

(1) Chlorine disinfection process following filtration that provides a CT (the product of concentration and modal contact time measured at the same point) of four hundred and fifty (450) milligram-minutes per liter (mg-min/L) measured at the end of the contact time based on total chlorine residual and a modal contact time of not less than ninety (90) minutes based on maximum day flow; or ( )

(2) Disinfection process that, when combined with filtration, has been demonstrated to achieve 5-log removal/inactivation of virus. Acceptance by the State of California as published in their Alternative Treatment Technology Report for Recycled Water is one (1) method to constitute such a demonstration. ( )

ii. Median number of total coliform organisms may not exceed two and two-tenths (2.2) per one hundred (100) milliliters, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. No sample may exceed twenty-three (23) organisms per one hundred (100) milliliters. ( )

iii. Daily sample and analyze recycled water for total coliform when allowed uses specifically require Class A recycled water. ( )

b. Turbidity. ( )

i. Recycled water must meet the following turbidity limits before disinfection: ( )

(1) For filtration systems using sand or other granular media or cloth media, the daily arithmetic mean of all measurements of turbidity may not exceed two (2) NTU, and turbidity may not exceed five (5) NTU at any time. ( )

(2) For filtration systems using membrane filtration, the daily arithmetic mean of all measurements of turbidity may not exceed zero point two (0.2) NTU, and turbidity may not exceed zero point five (0.5) NTU at any time. ( )

ii. One (1) in-line, continuously monitoring, recording turbidimeter exists for each treatment train after filtration and before disinfection. ( )

c. Nitrogen, pH, and BOD5. ( )

i. Total nitrogen may not exceed ten (10) milligrams per liter (mg/L) for ground water recharge systems and thirty (30) mg/L for residential irrigation and other non-recharge uses based on a monthly arithmetic mean as determined from weekly composite sampling. If a ground water quality impact assessment indicates lower limits are necessary to protect existing ground water quality beneficial uses, the Department will require lower limits. ( )

ii. The pH as determined by daily grab samples or continuous monitoring must be between six point zero (6.0) and nine point zero (9.0). ( )

iii. BOD5 may not exceed five (5) mg/L for ground water recharge systems, and ten (10) mg/L for residential irrigation and other non-recharge systems, based on a monthly arithmetic mean as determined from weekly composite sampling. ( )

02. Class B Recycled Water. To be classified Class B recycled water, municipal wastewater must be treated using processes identified in Table 1, or an equivalent process, and adequately disinfected. Class B treatment systems are reviewed by the Department and approved on a case-by-case basis. The Department may require pilot testing or demonstration before approval, or may condition approval upon the success of testing or demonstration. ( )

a. Total Coliform. ( )

i. Recycled water must be disinfected by either: ( )

(1) Chlorine disinfection process that provides a residual chlorine at the point of compliance of not less than one (1) mg/L total chlorine residual after a contact time of thirty (30) minutes at peak hour flow; or ( )

(2) An alternative disinfection process that has been demonstrated to the Department's satisfaction that the alternative process is comparable to that achieved by chlorination with a total chlorine residual of one (1) mg/L after a minimum contact time of thirty (30) minutes. ( )

ii. Median number of total coliform organisms may not exceed two and two-tenths (2.2) per one hundred (100) milliliters, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed. No sample exceeds twenty-three (23) organisms per one hundred (100) milliliters. ( )

iii. Daily sample and analyze recycled water for total coliform when allowed uses specifically require Class B recycled water. ( )

b. Turbidity. ( )

i. Daily arithmetic mean of all measurements of turbidity may not exceed five (5) NTU, and turbidity may not exceed ten (10) NTU at any time. The turbidity standard is met before disinfection. ( )

ii. One (1) in-line, continuously monitoring, recording turbidimeter exists for each treatment train after filtration and before disinfection. ( )

03. Class C Recycled Water. To be classified Class C recycled water, municipal wastewater must be treated using the processes identified in Table 1. ( )

a. Median number of total coliform organisms may not exceed twenty-three (23) per one hundred (100) milliliters, as determined from the bacteriological results of the last five (5) days for which analyses have been completed. No sample may exceed two hundred thirty (230) per one hundred (100) milliliters. ( )

b. Weekly sample and analyze recycled water for total coliform when allowed uses specifically require Class C recycled water. ( )

04. Class D Recycled Water. To be classified Class D recycled water, municipal wastewater must be treated using the processes identified in Table 1. ( )

a. Median number of total coliform organisms may not exceed two hundred thirty (230) per one hundred (100) milliliters, as determined from the bacteriological results of the last three (3) days for which analyses have been completed. No sample may exceed two thousand three hundred (2300) organisms per one hundred (100) milliliters. ( )

b. Monthly sample and analyze recycled water for total coliform when allowed uses specifically require Class D recycled water. ( )

05. Class E Recycled Water. To be classified Class E recycled water, municipal wastewater must be treated with screening, degritting, sedimentation and/or skimming processes to remove substantially all floatable and settleable solids. ( )

a. Class E recycled water has no disinfection requirements or applicable coliform standard. ( )

b. No sampling and analysis of total coliform are required for Class E recycled water. When sampling and analysis are required (e.g., buffer distance change reduction), the sampling frequency for total coliform will be established consistent with these rules to adequately protect human health and the environment. ( )

06. Point of compliance. For total coliform limits, the point in the system following final treatment and disinfection as defined in the permit. Recycled water disinfection requirements after storage will be determined by the Department on a case-by-case basis considering class and uses of recycled water, reuse site design, and protection of human health and the environment. ( )

07. Alternative Monitoring Frequency. Alternative total coliform monitoring frequencies may be considered by the Department on a case-by-case basis based upon demonstration that the alternative frequency is protective of human health and the environment. ( )

602. MUNICIPAL RECYCLED WATER: CLASSIFICATION AND USES TABLES

01. Municipal Recycled Water -- Classification Tables. The tables summarize treatment for municipal recycled water as outlined in Section 601. If discrepancies exist between Sections 601 and 602, follow Section 601.

TABLE 1 - CLASSIFICATION TABLE

		Class A	Class B	Class C	Class D	Class E
Oxidized		Yes	Yes	Yes	Yes	No
Filtered		Yes	Yes	No	No	No
Disinfected		Yes	Yes	Yes	Yes	No
Total coliform (organisms/ 100 milliliters)	Median results for last x-days for which analysis have been completed	2.2 7-day median	2.2 7-day median	23 5-day median	230 3-day median	No limit
	Maximum in any sample	23	23	230	2300	No limit
	Monitoring frequency	Daily	Daily	Once weekly	Once monthly	

( )

TABLE 2 - CLASS A AND CLASS B ADDITIONAL REQUIREMENTS

		Class A	Class B
Turbidity (NTU)	24-hour - mean, Not to exceed	Granular or cloth media - 2 Membrane filter - 0.2	Granular or cloth media - 5
	Maximum, in any sample	Granular or cloth media - 5 Membrane filter - 0.5	Granular or cloth media - 10
	Monitoring frequency	Continuous	Continuous
Disinfection contact time requirements		CT of 450 mg-min/L with 90 minutes of modal contact time, or Disinfection to 5-log inactivation of virus	Total chlorine not less than 1 mg/L after 30 minute contact time, or Comparable alternate process
Maximum total nitrogen (mg/L) Monthly arithmetic mean, from weekly composite samples not to exceed		Ground water recharge - 10 Residential irrigation and other non-recharge uses - 30	
BOD5 (mg/L) Monthly arithmetic mean, from weekly composite samples not to exceed		Ground water recharge - 5 Residential irrigation and other non-recharge uses - 10	
pH Daily grab samples or continuous monitoring		Between 6.0 and 9.0	

( )

02. Municipal Recycled Water - Uses Beneficial Reuse. This table summarizes municipal recycled water uses for specific classifications. Other uses not listed here may be considered on a case-by-case basis and approved by the Department.

TABLE 3 - RECYCLED WATER BENEFICIAL REUSE

Recycled Water Beneficial Reuse	Class A	Class B	Class C	Class D	Class E
Fodder, fiber crops	Yes	Yes	Yes	Yes	Yes
Commercial timber, firewood	Yes	Yes	Yes	Yes	Yes
Processed food crops or “food crops that must undergo commercial pathogen-destroying processing before being consumed by humans”	Yes	Yes	Yes	Yes	No

TABLE 3 - RECYCLED WATER BENEFICIAL REUSE

Recycled Water Beneficial Reuse	Class A	Class B	Class C	Class D	Class E
Ornamental nursery stock, or Christmas trees	Yes	Yes	Yes	Yes	No
Sod and seed crops not intended for human ingestion	Yes	Yes	Yes	Yes	No
Pasture for animals not producing milk for human consumption	Yes	Yes	Yes	Yes	No
Pasture for animals producing milk for human consumption	Yes	Yes	Yes	No	No
Orchards and vineyards irrigation during the fruiting season, if no fruit harvested for raw use comes in contact with the irrigation water or ground, or will only contact the inedible portion of raw food crops	Yes	Yes	Yes	No	No
Highway medians and roadside vegetation irrigation on sides	Yes	Yes	Yes	No	No
Cemetery irrigation	Yes	Yes	Yes	No	No
Parks, playgrounds, and school yards during periods of non-use	Yes	Yes	No	No	No
Parks, playgrounds, and school yards during periods of use	Yes	No	No	No	No
Golf courses	Yes	Yes	No	No	No
Food crops, including all edible food crops	Yes	Yes	No	No	No
Residential landscape	Yes	No	No	No	No
Dust suppression at construction sites and control on roads and streets	Yes	Yes	Yes	No	No
Toilet flushing at industrial and commercial sites, when only trained maintenance personnel have access to plumbing for repairs	Yes	Yes	Yes	No	No
Nonstructural fire fighting	Yes	Yes	Yes	No	No
Cleaning roads, sidewalks, and outdoor work areas	Yes	Yes	Yes	No	No
Backfill consolidation around non-potable piping	Yes	Yes	Yes	No	No
Soil compaction	Yes	Yes	Yes	No	No
Commercial campus irrigation	Yes	Yes	No	No	No
Fire suppression	Yes	Yes	No	No	No
Snowmaking for winter parks, resorts	Yes	No	No	No	No
Commercial laundries	Yes	No	No	No	No
Ground water recharge through surface application	Yes	No	No	No	No

TABLE 3 - RECYCLED WATER BENEFICIAL REUSE

Recycled Water Beneficial Reuse	Class A	Class B	Class C	Class D	Class E
Subsurface distribution	Yes	Yes	Yes	Yes	No

( )

603. MUNICIPAL RECYCLED WATER: ACCESS, EXPOSURE, AND SIGNAGE.

01. Class A Recycled Water. When using Class A recycled water, notify the public and personnel in the area that recycled water is used and is not safe for drinking. Post signs stating "Caution: Recycled Water - Do Not Drink" or equivalent signage. ( )

a. Distribution system identification and signage. ( )

i. For all new buried pipe conveying Class A Recycled Water, including service lines, valves, and other appurtenances, must use the color purple consistently throughout the system. The color proposed for use will be identified in the plans and specifications and reviewed by the Department to ensure the pipes are adequately identifiable and distinguishable. If fading or discoloration of the purple pipe is experienced during construction, identification tape or locating wire along the pipe is required. Label piping every ten (10) feet with "Caution: Recycled Water - Do Not Drink" or equivalent signage in English and a secondary language as applicable. ( )

ii. If identification tape is installed along with the purple pipe, use white or black printing on a purple color field as approved by the Department and label with "Caution: Recycled Water - Do Not Drink" or equivalent signage. The overall width of the tape is at least three (3) inches. Install identification tape eighteen (18) inches above the transmission pipe longitudinally, center over the pipe, and run continuously along the pipe's length. ( )

iii. Ensure all valves have locking valve covers that are non-interchangeable with potable water valve covers and inscribed on the top surface with "Recycled Water." Ensure all above ground pipes and pumps are consistently color coded purple and marked to differentiate Class A recycled water facilities from potable water facilities. ( )

b. Pumping facilities identification and signage. ( )

i. Paint all exposed and above ground piping, risers, fittings, pumps, and valves in purple. Label all piping using a means accepted by the Department with "Caution: Recycled Water - Do Not Drink" or equivalent signage. In a fenced pump station area, post signs on all sides. ( )

ii. Install warning labels with "Caution: Recycled Water - Do Not Drink" or equivalent signage on designated facilities such as, but not limited to, controller panels and washdown or blow-off hydrants on water trucks, hose bibs, and temporary construction services. ( )

c. Where Class A recycled water is stored or impounded, or used for irrigation in public areas, install warning signs with, at a minimum, one (1) inch purple letters on a white or other high contrast background notifying the public the water is unsafe to drink. Signs may also have a purple background with white or other high contrast lettering. Label warning signs with "Caution: Recycled Water - Do Not Drink" or equivalent signage. ( )

d. Place drinking fountains, picnic tables, food establishments, and other public eating facilities out of any spray irrigation area, or otherwise protect areas in which Class A recycled water is used. In construction plans, indicate exterior drinking fountains, picnic tables, food establishments, and other public eating facilities or, if these areas do not exist, state this in the plans and specifications. ( )

02. Class B Recycled Water. When using Class B recycled water, notify the public and personnel in the area that recycled water is used and is not safe for drinking. Post signs stating "Caution: Recycled Water - Do Not Drink" or equivalent signage in English and a secondary language as applicable. ( )

03. Class C Recycled Water. When using Class C recycled water for irrigation, notify the personnel in the area that recycled water is used and is not safe for drinking. For the public, post signs around the perimeter of the irrigation site stating "Warning: Recycled Water - Do Not Enter" or equivalent signage in English and a secondary language as applicable. ( )

04. Class D Recycled Water. When using Class D recycled water for irrigation, notify the personnel in the area that recycled water is used and is not safe for drinking. For the public, post signs around the perimeter of the irrigation site stating "Recycled Water - Do Not Enter" or equivalent signage in English and a secondary language as applicable. ( )

05. Class E Undisinfected Recycled Water. When using Class E undisinfected recycled water for irrigation, prevent public access to the irrigation site using a physical barrier or other measure approved by the Department. Post signs around the perimeter of the irrigation site stating "Warning: Recycled Water - Do Not Enter" or equivalent signage in English and a secondary language as applicable. ( )

604. REUSE FACILITIES: BUFFER DISTANCES.

01. Considerations. Buffer distances are established to: ( )

a. Protect human health by limiting exposure to recycled water and conditions associated with reuse facilities; ( )

b. Protect waters, including surface water, ground water and drinking water supplies; and ( )

c. Ensure use of recycled water is restricted to within the physical boundaries of the reuse facilities. ( )

02. Distances. To determine buffer distances in a reuse permit, the Department considers the following: ( )

a. Characterization of the recycled water; ( )

b. Method of irrigation; ( )

c. Physical or vegetative barriers; ( )

d. Microbial risk assessments; ( )

e. Applicable best management practices; ( )

f. Environmental conditions, such as wind speed and direction; and ( )

g. Other information relevant to this section. ( )

605. REUSE FACILITY: DESIGN AND CONSTRUCTION.
The design and construction of new reuse facilities, or existing facilities undergoing material modification, must comply with these rules and applicable provisions of IDAPA 58.01.16, "Wastewater Rules." ( )

01. Distribution Pipelines. ( )

a. Recycled water mains are treated as non-potable mains when considering their separation from potable water mains. Recycled water mains are treated as potable water mains when separated from sewer mains. ( )

b. When a system proposes using an alternative to the distribution pipeline requirements in these rules, IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems," or IDAPA 58.01.16, "Wastewater Rules," the design engineer submits data to the Department for review and approval to demonstrate that installing an

alternative will protect human health and the environment. ( )

02. Pumping Stations. ( )

a. Protect potable water used as seal water for recycled water pump seals from backflow using a Department-approved backflow prevention device or air gap. ( )

b. Ensure no direct connection is made between the potable and recycled water system. If it is necessary to put potable water into the recycled water distribution system, provide a Department-approved reduced pressure principal device or air gap to protect the potable water system. ( )

c. Equipment or facilities such as tanks, temporary piping or valves, and portable pumps used or considered for use with recycled water may not be used with potable water or sewage. Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps used or considered for use with sewage may not be used with recycled water or potable water. ( )

03. Requirements for Class A Recycled Water. ( )

a. Distribution System. ( )

i. Where Class A recycled water will be provided by pressure pipeline, use the following guidance: current edition of "Recommended Standards for Wastewater Facilities - Great Lakes-Upper Mississippi River Board of State Sanitary Engineers," "AWWA Manual M24" Chapter 4 for dual water systems, and current edition of "Idaho Standards for Public Works Construction." ( )

ii. Irrigation systems proposed for conversion from non-Class A recycled water to Class A recycled water use will be reviewed on a case-by-case basis to evaluate the protection of human health and the environment. ( )

(1) Existing water lines converted to use with Class A recycled water or a combination of Class A recycled water and irrigation water must be accurately located, pressure tested, and leakage tested before conversion in coordination with the Department. Use AWWA Standard(s) for pressure and leakage testing of drinking water lines to be converted. ( )

(2) Physically disconnect the pipeline from any potable water lines and bring into compliance with applicable cross-connection rules as stated in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems" and meet minimum separation requirements. ( )

(3) If the existing lines meet water supplier and Department approval based on these rules, the lines will be approved for Class A recycled water distribution. If compliance of the system (accurate location, pressure testing, and verification of no cross-connections) cannot be verified with record drawings, testing, televising, or otherwise, uncover the lines and inspect, identify, or otherwise verify compliance to the Department's satisfaction before use. Retrofit accessible portions of the system to meet the provisions of these rules. ( )

(4) After converting the water or irrigation line to a Class A recycled water line, mark the lines as stated in Subsection 603.01.a.iii. ( )

iii. If either an in-line type or end-of-line type blow-off or drain assembly is installed in the system, submit a plan for proposed discharge locations to the Department for review and approval. ( )

iv. Mixing Class A recycled water with other irrigation waters may be conducted pipe-to-pipe if both the other irrigation water source and the Class A source are protected by Department-approved backflow devices. Class A recycled water may be mixed with other irrigation water in an unlined pond if the Class A recycled water is permitted for ground water recharge. Class A recycled water that is permitted for irrigation only and not ground water recharge may be mixed with other irrigation water only in a lined pond. Water from these mixed ponds may then be used for permitted Class A uses. ( )

v. Operators of Class A recycled water distribution systems, including operators of distribution systems that use a combination of Class A recycled water and other irrigation waters, operators of the distribution system from the wastewater treatment plant to the point of compliance or point of use or point of sale, as applicable, and operators employed by buyers of the Class A recycled water for subsequent use, including home occupants, must sign a utility user agreement from the utility providing the Class A recycled water that states the user understands the origin of the effluent and the concept of agronomic rate for applying the Class A recycled water. Include these requirements in contracts for sale of Class A recycled water for subsequent use. Individual homeowners are allowed to operate or maintain Class A recycled water distribution systems. Providers of the Class A recycled water must offer a public education program within its service area to teach potential customers the benefits and responsibilities of using Class A recycled water. ( )

b. Surface water features, such as landscape impoundments used for Class A recycled water, that are not lined or sealed to prevent seepage may be approved if ground water quality standards for ground water protection are met. ( )

c. The Department approves the use of the following filter technologies to comply with these rules: ( )

i. Technologies approved and listed in the State of California Alternative Treatment Technology Report for Recycled Water. ( )

ii. The Department may approve filtration technologies other than those referenced in Subsection 605.03.c.i. if a written request is submitted with the product information. Approval of these filtration technologies will be in accordance with procedures in the State of California Alternative Treatment Technology Report for Recycled Water. ( )

d. The Department may require certain types of Class A recycled water filtration facilities to install and operate a filter-to-waste system that operates each time a filter starts up. Filter-to-waste systems automatically filter to waste until the effluent meets the required turbidity standard. ( )

e. Reliability and Redundancy Standards. ( )

i. Treatment systems must treat maximum day flow for the season in which Class A recycled water is produced and provide one (1) of the following alternative back-up systems: ( )

(1) Another permitted disposal option; or ( )

(2) Diversion to adequate lined storage capable of storing Class A recycled water during a malfunction or emergency. ( )

ii. An alternative back-up system is automatically activated if turbidity exceeds or chlorine residual drops below the instantaneous required value for more than five (5) minutes, or if the alternative filtration/ disinfection system is not achieving its required 5-log removal/inactivation of virus for more than five (5) minutes. The maximum number of times a facility could exceed on this basis is twice in one (1) week, and both times must be immediately reported. Failure to report or exceeding more than twice in one (1) week are sufficient grounds for the Department to shut down the system for inspection and repair. ( )

iii. Redundant monitoring equipment and automatic by-pass equipment must be provided. ( )

iv. Standby power is sufficient to maintain all treatment and distribution works or to meet the requirements for an alternative back-up system for the Class A recycled water facilities. ( )

f. New Class A recycled water systems defined as public utilities in Sections 61-104 (Corporation), 61-124 (Water System), 61-125 (Water Corporation), and 61-129 (Public Utility), Idaho Code, are governed by and must meet the requirements of Chapter 1, Title 61, Idaho Code, Public Utilities Law, and IDAPA 31.01.01, "Rules of Procedure of the Idaho Public Utilities Commission." In any conflict arising out of the application of these rules and IDAPA 31.01.01, follow IDAPA 31.01.01. ( )

606. REUSE FACILITY: RAPID INFILTRATION SYSTEM.

01. Criteria. Plans and specifications submitted to the Department for review and approval must demonstrate compliance with the following design criteria: ( )

a. Design the system to allow complete infiltration of recycled water into the soil followed by subsurface soil percolation where applied recycled water is transmitted down and away from the infiltration basins, without excessive mounding; ( )

b. Ensure the system consists of either two (2) or more cells that can be alternately loaded and rested, or one (1) cell preceded by an effluent storage or stabilization pond system. Where only one (1) cell is provided, ensure the storage and stabilization pond(s) have sufficient capacity to allow intermittent loading of the rapid infiltration systems; ( )

c. Design the rapid infiltration system to provide even distribution of the recycled water and prevent erosion; and ( )

d. Design the system to ensure proper operation during cold weather conditions. ( )

02. Requirements. Loading to a rapid infiltration system may not exceed the hydraulic, organic, nitrogen, suspended solids, or other limits specified in the permit or plans and specifications developed pursuant to a permit requirement. The Department will consider past operating performance, ability of the soils to treat the pollutants in the recycled water, hydrogeologic characteristics of the site such as permeability and infiltration rates, and other relevant information when determining discharge limitations. ( )

607. GROUND WATER RECHARGE THROUGH SURFACE APPLICATION.

01. Requirements. Minimum requirements for site location and aquifer storage time are based on site-specific modeling. ( )

02. Ground Water Monitoring. Provision must be made for monitoring the quality of the ground water in proximity of the application site. The ground water monitoring program is subject to approval by the Department. ( )

03. Down Gradient Beneficial Uses. Ground water recharge systems must be designed and operated in a matter that protects the beneficial uses of ground water on down gradient properties not under the control of the system owner. ( )

608. PERMIT FOR INDUSTRIAL REUSE FACILITIES.

01. Requirements. Industrial wastewater or recycled water may only be used according to a permit issued pursuant to these rules. Permit conditions and limitations are developed by the Department on a case-by-case basis and take into account specific characteristics of the wastewater to be recycled and treatment needed to ensure recycled water use complies with IDAPA 58.01.11, "Ground Water Quality Rule," and IDAPA 58.01.02, "Water Quality Standards." The permit application, processing, and issuance procedures set forth in these rules apply to industrial reuse permits. ( )

02. Permit Content. The Department includes provisions from Section 500, Standard Conditions, in all permits issued for industrial recycled water use. The Department will develop additional permit conditions on a case-by-case basis considering the following: ( )

a. Risk to human health and the environment; ( )

b. Degree of public access to the facility site where the recycled water is used and degree of human exposure anticipated; ( )

c. Additional measures to prevent nuisance conditions; ( )

d. Specific recycled water quality needed for the intended type of reuse; and ( )

e. Means of applying the recycled water. ( )

609. GENERAL REUSE PERMITS.

01. General Reuse Permit. The Department may issue at its discretion a general reuse permit according to the following: ( )

a. For wastewater or recycled water reuse that is determined by the Department to have minimal impact to human health and the environment; and ( )

b. Involves the same or substantially similar: ( )

i. Wastewater sources; ( )

ii. Treatment practices; ( )

iii. Reuse methods; or ( )

iv. Monitoring. ( )

02. Conditions. General reuse permits must include applicable conditions from Sections 500 and 600. ( )

03. Application for Coverage. Facilities applying for coverage of a general reuse permit must provide the applicable information required under Section 300.03. ( )

04. Administration. ( )

a. When issuing general reuse permits, the Department will follow Section 400 as applicable. ( )

b. When modifying general reuse permits, the Department will follow Section 700 as applicable. ( )

c. The Department will develop a staff analysis for each general reuse permit. ( )

d. The Department may terminate, revoke, or deny coverage under a general permit, and require the applicant to apply for and obtain a reuse permit. ( )

e. Any owner authorized by a general permit may request to be excluded from the coverage of the general permit by applying for a reuse permit. ( )

610. -- 699. (RESERVED)

700. PERMIT MODIFICATION.

01. Causes. A permit modification may be initiated by a permittee through a modification request or by the Department if one (1) or more of the following causes exist. ( )

a. Material and substantial alterations or additions to the permitted facility or activity occurred after permit issuance which justify applying permit conditions that are different or absent in the existing permit. ( )

b. Standards or regulations on which the permit was based amended by promulgation or by judicial decision after the permit was issued. ( )

c. The Department determines good cause exists for modifying a compliance schedule or terms and conditions of a permit. ( )

d. Level of discharge of any pollutant that is not limited in the permit exceeds the level that may cause an adverse impact to surface or ground waters. ( )

e. Correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions. ( )

f. When a treatment technology proposed, installed, and properly operated and maintained by the permittee fails to achieve the requirements of the permit. ( )

02. Minor Modifications. Minor permit modifications may be made without issuing a draft permit or public review. Examples include: ( )

a. The correction of typographical errors or formatting changes; ( )

b. Transfer of ownership or operational control, or responsible official; ( )

c. Change in monitoring or reporting frequency requirements, or revision of a laboratory method; ( )

d. Extend the permit expiration date or change compliance due date; ( )

e. Change or add a sampling location; ( )

f. Change to a higher level of treatment without a change in end uses; ( )

g. Change in terminology; ( )

h. Removal of an allowed use; ( )

i. Correct minor technical errors, such as citations of law, and citations of construction specifications; ( )

j. Change in a contingency plan resulting in equal or more efficient responsiveness; or ( )

k. Removal of acreage from irrigation without an increase in loadings. ( )

03. Major Modifications. The procedure for major modifications is the same as for a new permit. Examples include: ( )

a. Changes in the treatment system; ( )

b. Adding an allowed use; ( )

c. Changes to a lower (less treated) class of water; ( )

d. Adding acreage used for irrigation; or ( )

e. Changes to less stringent discharge limitations. ( )

701. -- 799. (RESERVED)

800. PERMIT TRANSFER.

01. General. A permit may be transferred only upon Department approval. No transfer is required for a corporate name change if the permittee, via secretary of state filings, can verify a change in name alone occurred. An attempted transfer is not effective until approved in writing by the Department. ( )

02. Request. Either the permittee or the person to whom the permit is proposed to be transferred (transferee) must submit to the Department for transfer at least thirty (30) days before the proposed transfer date. The request for transfer includes: ( )

a. Legal name and address of the permittee; ( )

b. Legal name and address of the transferee; ( )

c. Location and the common name of the facility; ( )

d. Date of proposed transfer; ( )

e. Sufficient documentation for the Department to determine that the transferee will comply with IDAPA 58.01.16, "Wastewater Rules," relating to technical, financial, and managerial capacity; ( )

f. Signed declaration by the transferee that the transferee has reviewed the permit and understands the terms of the permit; ( )

g. Sworn statement that the request is made with the full knowledge and consent of the permittee if the transferee is submitting the request; ( )

h. Identification of any judicial decree, compliance agreement, enforcement order, or other outstanding obligating instrument, the terms of which have not been met, along with legal instruments sufficient to address liabilities under such decree, agreement, order, or other obligating instrument; and ( )

i. Other information the Department may reasonably request. ( )

03. Effective Date. The effective date of the transfer is the date of the Department's approval. ( )

04. Compliance with Permit Conditions. Responsibility for compliance with the permit and liability for any associated violation is assumed by the transferee upon the effective date. Before transfer approval, the permittee is responsible for complying with the permit and is liable for any associated violation, regardless of whether ownership or operational control of the permitted facility has been transferred. ( )

05. Transferee Liability Before Transfer Approval. If a proposed transferee causes or allows operation of the facility under his ownership or control before approval of the permit transfer, the transferee is considered to be operating without a permit or authorization required by these rules and may be cited for additional violations as applicable. ( )

06. Compliance Record of Transferee. The Department may consider the prior compliance record of the transferee, if any, in the decision to approve or disapprove a transfer. ( )

801. TEMPORARY CESSATION OF OPERATIONS AND CLOSURE.

01. Temporary Cessation. A permittee must implement any applicable conditions specified in the permit for temporary cessation of operations. When the permit does not specify applicable temporary cessation conditions, the permittee must notify the Department before a temporary cessation of reuse operations at the facility greater than sixty (60) days in duration and any cessation not for regular maintenance or repair. Cessation of operations necessary for regular maintenance or repair of a duration of sixty (60) days or less do not require Department notification under this section. Notification compliance under this section includes a proposed temporary cessation plan to ensure the cessation of operations will not pose a threat to human health and the environment. ( )

02. Closure. A closure plan is required when a facility is closed voluntarily and when a permit is revoked. A permittee implements any applicable conditions specified in the permit for facility closure. Unless otherwise directed by the terms of the permit or by the Department, the permittee submits a closure plan to the Department for approval at least ninety (90) days before ceasing operations. The closure plan ensures the closed facility will not pose a threat to human health and the environment. Closure plan approval may be conditioned upon a permittee's agreement to complete such site investigations, monitoring, and any necessary remediation activities. A permittee must complete all closure plan activities. ( )

802. -- 919. (RESERVED)

920. PERMIT REVOCATION.

01. Conditions. The Department may revoke a permit or coverage under a reuse general permit if the permittee violates any permit condition or these rules, or the Department becomes aware of any omission or misrepresentation of condition or information relied upon when issuing the permit. ( )

02. Notice. Except in emergencies, the Department will issue a written notice of intent to revoke to the permittee before final revocation. Revocation becomes final within thirty-five (35) days of the permittee receiving notice unless, within that time, the permittee requests an administrative hearing in writing. The hearing is conducted according to IDAPA 58.01.23, Contested Case Rules and Rules for Protection and Disclosure of Records. ( )

03. Emergency Action. If the Department finds the human health, safety, or welfare requires emergency action, the Department will incorporate findings to support the action and issue a written notice of emergency revocation to the permittee. Emergency revocation is effective upon receipt by the permittee. If requested by the permittee in writing, the Department will provide the permittee a revocation hearing. Hearings are conducted according to IDAPA 58.01.23, Contested Case Rules and Rules for Protection and Disclosure of Records. ( )

04. Revocation and Closure. A permittee must perform the closure requirements in a permit and these rules and complete all closure plan activities regardless of the permit revocation. ( )

921. -- 939. (RESERVED)

940. WAIVERS.
Waivers from these rules may be granted by the Department on a case-by-case basis upon full demonstration by the person requesting the waivers that activities for which the waivers are granted will not have a detrimental effect upon existing water quality and beneficial uses are adequately protected. A violation of a waiver from these rules is a violation of the rules. ( )

941. -- 999. (RESERVED)