

**Negotiated Rule Draft No. 4**  
**Docket No. 58-0102-1801, Dated February 23, 2022**

This draft includes revisions based on the November 4, 2021, meeting discussion and review of written comments received. The revisions are highlighted in yellow.

DEQ is not requesting public comments on this draft. The next comment period will commence upon publication of the proposed rule in the March 2, 2022 Idaho Administrative Bulletin under Docket No. 58-0102-2201. Proposed rule comment deadline April 1, 2022.

**Water Quality Standards**  
**IDAPA 58.01.02**

**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. (3-28-18)

**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. (3-28-18)

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.

~~(3-28-18)~~

**a.** Table 1 contains criteria ~~set for~~ to 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.~~

~~(3-28-18)~~

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.

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b. Table 2 contains criteria ~~set for~~ to ~~protection 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. (3-28-18)

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	<sup>a</sup> CAS Number	Carcinogen?	Water & Fish ( $\mu\text{g/L}$ <u>unless otherwise specified</u> )		Fish Only ( $\mu\text{g/L}$ <u>unless otherwise specified</u> )	
<b>Inorganic Compounds/Metals</b>						
Antimony	7440360		5.2	b	190	b
Arsenic <sup>1</sup>	7440382	Y	10	cdj	10	cdj
<p><b>Note:</b> In 2008, Idaho adopted 10 <math>\mu\text{g/L}</math> 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 of 10 <math>\mu\text{g/L}</math>. Neither EPA nor the state of Idaho has promulgated replacement criteria. For more information, go to <a href="http://www.deq.idaho.gov/epa-actions-on-proposed-standards">http://www.deq.idaho.gov/epa-actions-on-proposed-standards</a>.</p>						
<p><u><sup>1</sup>Effective for CWA purposes. Water &amp; 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<sup>2</sup> immediately below.</u></p>						
Arsenic <sup>2</sup>	7440382	Y	10 <del>;</del> <u>8.0 <math>\mu\text{g/kg}</math></u> fish tissue	cdj <del>k</del>	<del>104.3;</del> <u>8.0 <math>\mu\text{g/kg}</math></u> fish tissue	cdj <del>k</del>
<p><del><b>Note:</b> In 2008, Idaho adopted 10 <math>\mu\text{g/L}</math> 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 of 10 <math>\mu\text{g/L}</math>. Neither EPA nor the state of Idaho has promulgated replacement criteria. For more information, go to <a href="http://www.deq.idaho.gov/epa-actions-on-proposed-standards">http://www.deq.idaho.gov/epa-actions-on-proposed-standards</a>.</del></p>						

<sup>2</sup>Not yet effective for CWA purposes. ~~Water & Fish footnote k~~, Fish Only value, and ~~Fish Only footnote lk~~ 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.

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**Footnotes for Table 2. Criteria for Protection of Human Health**

(Break)

c. Inorganic forms only.

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

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j. This criterion is based on the drinking water Maximum ~~Containment~~ Contaminant Level (MCL).

~~k. Human health criteria for Water & Fish exposure to inorganic arsenic are attained if fish tissue concentrations comply with the Fish Only criterion and water column concentrations do not exceed 10 µg/L.~~

~~lk. For Fish Only exposure to inorganic arsenic, the human health criterion is:~~

<del>Fish Tissue (µg/kg wet-weight)</del>	<del>Water Column (µg/L)</del>
<del>8.0<sup>1</sup></del>	<del>4.3<sup>2</sup></del>

~~<sup>1</sup>Fish tissue element is based on total recoverable inorganic arsenic in muscle or fillet. When sufficient fish tissue data are available, and there are no new or increasing point source discharges of arsenic, the fish tissue element supersedes the water column element. Fish tissue element will be applied in accordance with Subsection 210.03.e.~~

~~<sup>2</sup>Water column element is based on dissolved inorganic arsenic in water.~~

~~Footnotes ~~k and l~~ are 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.~~

~~(3-28-18)~~

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**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. (3-25-16)

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d. Application of toxics criteria. (3-25-16)

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. (3-28-18)

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. (3-28-18)

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. (3-28-18)

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, **game fish when present**, collected from the same water body **and** within the same calendar year, **where the smallest individual is no less than seventy-five percent (75%) of the total length (size) of the largest individual.** 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. ~~When translating fish tissue criterion element to a water column value, the translation will be based on the ratio of total recoverable inorganic arsenic in fish muscle or fillet tissue to ambient water column concentration of dissolved inorganic arsenic from at least one paired water column and tissue sample.~~ The 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:**

$WC_T (\mu g/L)$  is the translated water column value; and

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

v. ~~Fish tissue sample(s) should be representative of gamefish species present at the site.~~ 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) Fish tissue samples must be representative of the fish species present within the waterbody and include game fish species whenever practical. 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.

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**05. Development of Toxic Substance Criteria. (4-5-00)**

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**b. Human Health Criteria. (4-5-00)**

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. (3-25-16)

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. (3-25-16)

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. (3-25-16)

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 water quality criteria for 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.