DEQ's Response to Comments
Draft Arsenic Guidance
Docket No. 58-0102-2201

1	J.R. Simplot Company
2	U.S. EPA Region 10

Section Title	Commenter	Comment Summary	Response
Executive Summary, Effects of Physical and Chemical Properties on Speciation of Arsenic	1	Correct the use of the term "neutralized" in reference to arsenic transformation, instead stating that arsenic cannot be destroyed, but can be transformed.	DEQ agrees with the suggested terminology and has removed the term "neutralized," and referred instead to the transformation of inorganic and organic arsenic.
	2	The Water & Fish criterion is for total recoverable arsenic, while the Fish Only criterion (including translations of the fish tissue) apply to dissolved arsenic. Please indicate if it is necessary to use a conversion factor to compare translated tissue values to the Water & Fish, and, if so, what would that factor be.	DEQ has included language in Section 11 directing permitters to IDAPA 58.01.02.210.02 for conversion factors for arsenic.
Executive Summary	1	When discussing the water column translation result, DEQ stated that "…may result in a water column value more or less stringent than the statewide water column element depending on the site-specific conditions." Commentor points out that because the translation is based on the statewide fish tissue criterion of 8 µg/L, the stringency has not changed, and suggests using the language "greater or less than the statewide criteria" instead.	The water column translation is a translation of the fish tissue criterion to a water column element using a site-specific TL-BAF. Since the translation incorporates the statewide fish tissue criterion, it is not considered a site-specific criterion, and reflects the relationship of the target fish tissue value and the site-specific conditions. DEQ appreciates the clarifying suggestion and has incorporated this in the text.
		Suggests averaging all gamefish tissue samples together when evaluating for compliance with criteria.	DEQ appreciates the comments received. However, the rule states that one sample is considered a composite of a minimum of five fish of the same species, and that compliance with the criteria is evaluated by sample, but "the department will evaluate all representative fish tissue data to determine compliance." While it is possible to composite across the same species over time, it is not in the rule to evaluate compliance by averaging differing species and trophic levels together. (58.02.01.210.3.e)

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Water Column Element (4.1.2)	2	The draft guidance states that when sampling for compliance that even though no minimum number of samples is required, the sample should represent the annual average concentration. DEQ should elaborate on how staff or stakeholders can ensure that samples represent annual average concentrations and should clarify how the state will act on water column data. For example, in the absence of multiple samples, would DEQ act on a single sample if it represents an exceedance, and if not, how would DEQ ensure that sufficient samples are obtained to compare to criteria.	Thank you for your comment. The sentence has been edited to say "*No minimum number of samples is required in the rule; however, the samples will need to have seasonal variation as much as logistically possible and will be evaluated as an arithmetic annual mean for compliance. The sampling plan will be reviewed by DEQ to ensure it's a representative sample*"
Water Column Translation (4.3)	2	Guidance discusses using site-specific translation for CERCLA actions. The rule language limits CWA application of site-specific translation to "…development of effluent limits, TMDL targets, or water column targets for fishless waters." While translation may be appropriate for non-CWA applications such as CERCLA actions, the guidance should clarify that these applications are not CWA applications of the criteria and may need to reference appropriate authorities under CERCLA or state regulations.	DEQ clarified this paragraph by adding: "*The translation may also be appropriate for non-Clean Water Act applications such as remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). However, these are not CWA applications of the criteria, and the application would need to work with the appropriate authorities under CERCLA or state regulations*."
Water Column Translation Data Requirements (4.3.1)	1	Clarifying fish biologist consultation for the water column translation.	DEQ has clarified that for the development of a site-specific TL-BAF, applicants should seek consultation with a fish biologist *with appropriate experience and background*. For the development of the site-specific BAF, all representative gamefish should be sampled. Fish species which should be represented in the site-specific TL-BAF sampling should be established with fish population survey data, and/or with the consultation of a knowledgeable fish biologist.
Fish-Tissue Monitoring and Assessment (5.1)	2	EPA suggests that any sampling and analysis plan should include a description of the intended use of the data (e.g., translation for fishless water, or effluent limit development) as this may affect the sampling location and timing. In addition, the guidance should suggest analysis to determine sampling locations and how those locations were determined to be representative of the Assessment Unit.	DEQ agrees with this comment and has added the following sentence: "*The sampling and analysis plan should include a description of the intended use of the data (e.g., translation for fishless water, or effluent limit development) as this may affect the sampling location and timing"*

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Recommended Species (5.1.1)	2	The definition for game fish provided in Section 4.1.1 is “fish routinely pursued by recreational anglers and can be consumed” and are listed based on the Idaho Department of Fish and Game (IDFG) rules. In Section 5.1 of the draft guidance, in addition to a reference to Section 4.1.1, the definition is restated as “fish routinely pursued in the evaluated water body” without mention of angler consumption. We recommend that, in order to ensure clarity and consistency, DEQ define game fish species through reference to IDFG rules at the first mention of game fish only.	DEQ agrees with the comment and have added consistency throughout the document.
Fishless Waters (6)	1	Suggests removing “seasonal variability” from bulleted list of considerations when developing site-specific TL-BAF since the ratio of arsenic in fish tissue to water column should remain representative over year, even considering changes in concentrations.	DEQ agrees that the proportion of inorganic arsenic in water and in fish tissue should remain relatively constant after 90 days from new discharges and has removed the term “Seasonal” from the bulleted list of considerations.
	2	The text and the text box use different phrases when referring to the location of sampling for bioaccumulation modeling for fishless waters. The text box uses immediate downstream” while the text uses “nearest water body.” The rule language at IDAPA 58.01.02.210.e states that … “In fishless waters, surface water and fish tissue from the immediate downstream waters may be used for bioaccumulation modeling.” For consistency within guidance and with the rule, the guidance should use “immediate downstream” whenever discussing the location of sampling for bioaccumulation modeling for fishless waters	DEQ agrees with the definition for sampling in fishless waters to mean “*immediately downstream*” and have changed the text whenever discussion the location of sampling for the bioaccumulation modeling for fishless waters.
Identifying Impairments for Integrated Report (7)	2	DEQ Should clarify that the translated water column value is compared to the annual arithmetic mean of the samples taken.	DEQ agrees with this comment and the value comparison to annual arithmetic mean has been clarified.

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Idaho Pollutant Discharge Elimination System (11)	1, 2	Section 11 implies that RPTE analysis requires water column data, while Section 11.1 states that either fish tissue or water column data can be used for RPTE. Section 11 should be revised to reflect that fish tissue data can also be used for RPTE.	DEQ agrees with this comment and has included fish tissue data.
	2	The guidance should clarify how DEQ will ensure protection of downstream waters within and outside of Idaho's borders. Because Idaho arsenic human health criteria are less stringent than downstream jurisdictions, it is important that DEQ consider downstream effects when implementing the arsenic HHC in CWA programs. EPA suggests the following language be added to the first sentence: "IPDES regulations require permit writers to assess the impact of discharges on downstream water quality and address situations where the discharge will cause, have the reasonable potential to cause, or contribute to an excursion above downstream water quality standards"	DEQ agrees with this suggestion and the sentence has been changed to say "*IPDES regulations require permit writers to assess the impact of discharges on to evaluate downstream water quality and address situations where the discharge will cause, have the reasonable potential to cause, or contribute to an excursion above downstream water quality standards."*
Establishing Permit Conditions (11.2)	1	The commentor asks that the discussion of RPTE in the implementation guidance needs to include language that allows permittees to determine if fish tissue criterion element exceedances represent RPTE or natural conditions	DEQ has added additional wording to this section to help clarify: "*As part of the permit development process, the RPTE process is used to determine necessity of effluent limitations for arsenic. For facilities that have the potential to discharge arsenic, the permit writer has discretion as to the level of RPTE analysis that is required. To determine RPTE, federal regulations require accounting for existing controls on point and nonpoint sources of arsenic, the variability of arsenic in the effluent, background conditions, and, where appropriate, the dilution of the effluent in the receiving water. Permit writers should use available data, best practices, and best professional judgment as a screening tool to determine whether it is necessary to go through the full RPTE statistical analysis*."
Appendix A	2	Suggest removing DI (drinking water intake) term from equation. It is not defined, and since the equation was not used for deriving the Water & Fish criterion, it is unnecessary and confusing to include in the equation.	The drinking water intake was incorrectly included in the equation, as it was not used in calculating for recreational use criteria. The value has been removed.
Appendix B	1	1.b.i: Suggested edits to scenario under "recreational use waters with fish" which included a scenario where water column data is available, but fish tissue data is not.	DEQ has updated the scenario to "*fish tissue has not yet been sampled,"*

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	2	Example #2: ii(1) indicates that a water column violation would be considered a criterion exceedance, even if tissue element was met. Our understanding of the rule language is that if the Water & Fish water column criterion is met, and the tissue element of the Fish Only criterion is met, then the water body would be full support of both the DWS use (Water & Fish criterion) and recreation uses (Fish Only fish tissue element supersedes water column element). Suggest DEQ reevaluate this example and revise if necessary.	DEQ agrees that if fish tissue is in compliance, then the water body is fully supporting its recreation use as long as the water column value does not exceed the domestic water supply criteria. The example has been updated to: *"(1) Water body is in compliance with the recreational use criterion element."*
Appendix B	1	Example 2.a.iv: Simplot recommends that continuing compliance can also be demonstrated by collecting fish tissue.	The suggestion is consistent with the rule language, and the bullet has been expanded to include fish tissue: "*Continued collection of fish tissue data can be used to demonstrate continued compliance, or a water column translation value can be developed using a site-specific TL-BAF and continuing compliance demonstrated using water column data."*
Appendix B	2	Example #3. The description at ii(1) is confusing. The rule requires that for fishless waters, translation of the fish tissue criterion element is based on paired water and fish tissue from the immediate downstream water body. In other words, translations must be based on spatially paired data. The resulting translation can then be used to determine compliance in the upstream, fishless water.	The reference to using non-spatially paired samples has been removed. Bioaccumulation factors can only be calculated using paired fish tissue and water column samples, for fishless streams, this can be collected from the immediate downstream waters.
Appendix B	2	Example #3: In the example at iii(1) it is suggested that a fishless water would be considered impaired if downstream fish tissue exceed the criterion. This seems inconsistent with other provisions of the guidance, where data are applied to a water body, defined as an assessment unit. If the fishless water is not within the same assessment unit as the fish tissue sample, it seems like it would be inappropriate to base listing decisions on the fish tissue data, regardless of support status.	DEQ feels this scenario is too complex to try to explain in one sentence and would require an approved sampling plan. We have determined it is best to remove this example from the appendix.