

Informal Public Meeting for Proposed Rulemaking

October 6, 2026

Tulsa, OK

Rulemaking Timeline



Agenda - 606

- Added/modified definitions
- Added language for determination of reasonable potential for selenium
- Added equations for selenium LTA_c and fish tissue to water column conversion for WLA_c to Appendix L

Agenda - 730

- Added, removed and/or modified certain definitions
- Primary Body Contact Recreation: swimming advisory and permitting purposes only
 - 303(d) criteria remain the same/no changes
- Secondary Body Contact Recreation: Numeric criteria for *E. coli* and enterococci were added based on EPA's water ingestion formula

Agenda – 730

- Appendix E
 - Added language for use of a copper biotic ligand model to develop site-specific criteria for copper
 - Added language to allow the use of a fish tissue study to develop selenium site-specific criteria
 - Removed site-specific metals criteria that were not approved by EPA
- Appendix F: Removed segment averages that were not approved by EPA (chloride, sulfate, TDS)
- Appendix G: Recalculated certain criteria and added Aquatic Life and Human Health criteria values based on EPA's recommended values (304(a))
- Appendix H was missing in the official version of Chapter 730, added back in for this revision

Agenda - 740

- Added, removed and/or modified certain definitions
- Reasonable potential: Added language to allow the use of a selenium fish tissue study to confirm the need for a WQBEL
- Assessment of Fish and Wildlife Propagation support: Added fish tissue criteria as the preferred method for assessing waterbodies for selenium, with water column criteria being used if fish tissue is unavailable
- Updated criteria for assessment of Secondary Body Contact Recreation

606 - Definitions

- **“Regulatory low flow”** means a condition where the flow of water in a stream is significantly reduced, often during prolonged dry weather. This phenomenon is characterized by decrease in stream flow, which can be defined by specific statistics such as the 7Q2 or 30Q2. Regulatory low flow is important for setting permit discharge limits and ensuring ecological protection, as it can lead to water quality issues and affect water resources. 30Q2 shall be used only for setting discharge permit limits for selenium.
- **“30Q2”** means the 30-day low flow of a stream likely to occur with a 50% probability each year. The procedure for determining a site-specific 30Q2 is described at OAC 252:740-1-6.

- Language changed to reflect use of 30Q2 for selenium
 - Changed “7Q2” to “regulatory low flow” since 30Q2 is being used for selenium
 - No seasonal 30Q2 so seasonal 7Q2 remains the same.
 - Selenium monthly average (30-day) exposure water column criteria
- **606-6-53. Q* ratio for the implementation of numerical criteria for toxic substances to protect the Fish and Wildlife Propagation beneficial use**
 - Added “For selenium only, $Q_{u(30Q2)}$ shall be used in place of $Q_{u(7Q2)}$ ”

- **606-6-55. Wasteload allocations for the implementation of numerical criteria for toxic substances to protect the Fish and Wildlife Propagation beneficial use**
 - For WLA_c , where fish tissue data is evaluated, a conversion from fish tissue to water column numeric criteria following Equations L-12 and L-13 shall be required.

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Appendix L

(4) WLA_A and WLA_C for discharges to streams.

(A) Acute criteria WLA.

$$WLA_A = C_B + \frac{100(C_A - C_B)}{Q_e}, \text{ where } Q_e \text{ is expressed in cfs.} \quad [L-1]$$

$$WLA_A = C_B + \frac{64.63(C_A - C_B)}{Q_e}, \text{ where } Q_e \text{ is expressed in MGD.} \quad [L-2]$$

(B) Chronic criteria WLA.

$$WLA_C = C_B + \frac{(1 + Q^*)(C_C - C_B)}{(1.94 Q^*)}, \text{ where } Q^* \leq 0.1823. \quad [L-3]$$

$$WLA_C = C_B + (6.17 - 15.51 Q^*)(C_C - C_B), \text{ where } 0.1823 < Q^* < 0.3333. \quad [L-4]$$

$$WLA_C = C_C, \text{ where } Q^* \geq 0.3333. \quad [L-5]$$

(5) WLA_A and WLA_C for discharges to lakes. The chronic WLA is calculated if a chronic criterion applies. An acute WLA is used only in the absence of a chronic criterion.

$$WLA_{C,A} = C_B + \frac{20.15(C_{C,A} - C_B)}{D}, \text{ where the discharge is by pipe.} \quad [L-6]$$

$$WLA_{C,A} = C_B + \frac{4.2(C_{C,A} - C_B)}{\sqrt{W}}, \text{ where the discharge is by canal.} \quad [L-7]$$

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Appendix L

(6) **LTA_A and LTA_C (99% probability basis).** Whether the receiving water is a stream or lake, criterion LTAs are calculated in the same fashion. LTA_{TOX} is the more stringent of the two toxicity LTAs.

$$LTA_A = WLA_A \times \text{EXP} \left(0.5 \ln \left(1 + CV^2 \right) - 2.326 \sqrt{\ln \left(1 + CV^2 \right)} \right) \quad [\underline{\text{L}}-8]$$

$$LTA_C = WLA_C \times \text{EXP} \left(0.5 \ln \left(1 + \frac{CV^2}{4} \right) - 2.326 \sqrt{\ln \left(1 + \frac{CV^2}{4} \right)} \right) \quad [\underline{\text{L}}-9]$$

$$LTA_C = WLA_C \times \text{EXP} \left(0.5 \ln \left(1 + \frac{CV^2}{30} \right) - 2.326 \sqrt{\ln \left(1 + \frac{CV^2}{30} \right)} \right) \quad [\underline{\text{L}}-9\text{a}]$$

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Appendix L

(8) Fish tissue to water column conversion for WLA_C.

$$BAF = \frac{C_{tissue}}{C_{water}}, \text{ where:} \quad [L-12]$$

BAF = bioaccumulation factor derived from site-specific field-collected samples of tissue and water (L/kg).

C_{tissue} = concentration of selenium in field-collected fish tissue (mg/kg dw).

C_{water} = ambient concentration of selenium in water (mg/L).

$$C_{target} = \frac{C_{tissue \text{ criterion element}}}{BAF}, \text{ where:} \quad [L-13]$$

C_{target} = translated site-specific water column criterion element (mg/L).

C_{tissue criterion element} = tissue criterion element (mg Se/kg dw).

BAF = bioaccumulation factor derived from site-specific field-collected samples of tissue and water (L/kg).

- **252:606-6-86. Implementation of bacterial criteria to protect the Primary Body Contact Recreation (PBCR) and the Secondary Body Contact Recreation (SBCR) beneficial use**
 - (c) **SBCR waterbodies.** One of the following bacterial limitations and monitoring requirements shall be used year-round for permittees that discharge fecal coliform to waterbodies on the 303(d) list for bacteria:
 - (1) ***Escherichia coli (E. coli)*.** When *E. coli* is the bacterial indicator:
 - (A) The monthly geometric mean shall not exceed ~~630~~ 242/100 mL.
 - (B) The daily maximum ~~for lakes~~ shall not exceed ~~1175~~ 781/100 mL.
 - ~~(C) The daily maximum for all waterbodies other than lakes shall not exceed 2030/100 mL.~~
 - (2) **Enterococci.** When enterococci are the bacterial indicator:
 - (A) The monthly geometric mean shall not exceed ~~165~~ 63/100 mL.
 - (B) The daily maximum ~~for lakes~~ shall not exceed ~~305~~ 208/100 mL.
 - ~~(C) The daily maximum for all waterbodies other than lakes shall not exceed 540/100 mL.~~

730 - Definitions

- **“30Q2”** means the thirty-day, two-year low flow.
- **“Bioaccumulation Factor” or “BAF”** is the ratio of the concentration of a chemical in the tissue of an aquatic organism to the concentration of the chemical dissolved in ambient water at the site of sampling.
- **“Biotic Ligand Model” or “BLM”** means a metal bioavailability model that uses receiving water body characteristics and monitoring data to develop site-specific water quality criteria.
- **“Coliform group organisms”** – Added “Measurements of bacteria can be expressed as either colony forming units (cfu) or most probable number (MPN).”

730 - Definitions

- **“Total Dissolved Selenium” or “TDSe”** means a measure of the combined content of all species of selenium that are dissolved in the water column and small enough to pass through a 0.45 micron (µm) filter.
- **“Steady-state”** refers to an aquatic ecosystem where the inputs are stable, and the bioaccumulation of toxins or inputs have reached homeostasis within organisms in the system. DEQ will require a waiting period of 6-months in rivers and streams, and 3-years in lakes following any major changes to system inputs or discharges.
- **"Sensitive representative species"** means species with published LC50 value(s) used in toxicity testing such as, but not limited to, *Ceriodaphnia dubia*, *Daphnia magna*, *Daphnia pulex*, *Pimphales promelas* (Fathead minnow), and *Lepomis macrochirus* (Bluegill sunfish), which may either be indigenous to a particular waterbody or used as surrogate species to represent sensitive vertebrate and invertebrate species indigenous to the waterbody.

730-5-16. Primary Body Contact Recreation

(1) *Escherichia coli* (*E. coli*): For swimming advisory purposes, no sample shall exceed a 75% one-sided confidence level of 235 cfu per 100 mL in all Primary Body Contact Recreation beneficial use areas. This value is based on samples collected over the recreation period.

For permitting purposes, *E. coli* shall not exceed a monthly geometric mean of 126 cfu per 100 mL based upon a minimum of not less than five (5) samples collected over a period of not more than thirty (30) days. Within the same 30-day interval, there should not be greater than a ten percent excursion of the statistical threshold value of 406 cfu per 100 mL. These values are based upon all samples collected over the recreation period. The Secondary Body Contact Recreation criteria shall apply during the remainder of the year.

For purposes of Sections 303(d) and 305(b) of the federal Clean Water Act as amended, beneficial use support status shall be assessed using only the geometric mean criterion of 126 cfu per 100 mL compared to the geometric mean of all samples collected over the recreation period.

730-5-16. Primary Body Contact Recreation

(2) *Enterococci*: For swimming advisory purposes, no sample shall exceed a 75% one-sided confidence level of 61 cfu per 100 mL in all Primary Body Contact Recreation beneficial use areas. This value is based on samples collected over the recreation period.

For permitting purposes, enterococci shall not exceed a monthly geometric mean of 33 cfu per 100 mL based upon a minimum of not less than five (5) samples collected over a period of not more than thirty (30) days. Within the same 30-day interval, there should not be greater than a ten percent excursion of the statistical threshold value of 108 cfu per 100 mL. These values are based upon all samples collected over the recreation period. The Secondary Body Contact Recreation criteria shall apply during the remainder of the year.

For purposes of Sections 303(d) and 305(b) of the federal Clean Water Act as amended, beneficial use support status shall be assessed using only the geometric mean criterion of 33 cfu per 100 mL compared to the geometric mean of all samples collected over the recreation period.

730-5-17. Secondary Body Contact Recreation

- Calculated numeric criteria for SBCR using ingestion ratio equation

$$C_{secondary} = C_{primary} \times \frac{I_{primary}}{I_{secondary}}$$

E. coli

○ Kayaking

- GM: $126 * \frac{10}{5.2} = 242.3$
- STV: $406 * \frac{10}{5.2} = 780.8$

Enterococcus

○ Kayaking

- GM: $33 * \frac{10}{5.2} = 63.5$
- STV: $108 * \frac{10}{5.2} = 207.7$

730-5-17. Secondary Body Contact Recreation

- (a) The Secondary Body Contact Recreation beneficial use is designated where ingestion of water is not anticipated. Associated activities may include boating, fishing, or wading.
- (b) Secondary Body Contact Recreation criteria are calculated using a ratio of water ingestion during secondary activities compared to primary activities. The criterion was calculated using ingestion values for kayaking, the Secondary Body Contact Recreation activity with the highest measured ingestion rate.
- (c) *Escherichia coli* (*E. coli*): The *E. coli* geometric mean criterion is 242 cfu per 100 mL and the statistical threshold value is 781 cfu per 100 mL. For purposes of Sections 303(d) and 305(b) of the federal Clean Water Act as amended, beneficial use support status shall be assessed using only the geometric mean criterion of 242 cfu per 100 mL. For permitting purposes, *E. coli* shall not exceed a monthly geometric mean of 242 cfu per 100 mL based upon a minimum of not less than four (4) samples collected over a period of not more than thirty (30) days. Within the same 30-day interval, there should not be greater than a ten percent excursion of the statistical threshold value of 781 cfu per 100 mL.

730-5-17. Secondary Body Contact Recreation

(d) Enterococci: The enterococci geometric mean criterion is 63 cfu per 100 mL and the statistical threshold value is 208 cfu per 100 mL. For purposes of Sections 303(d) and 305(b) of the federal Clean Water Act as amended, beneficial use support status shall be assessed using only the geometric mean criterion of 63 cfu per 100 mL. For permitting purposes, enterococci shall not exceed a monthly geometric mean of 63 cfu per 100 mL based upon a minimum of not less than four (4) samples collected over a period of not more than thirty (30) days. Within the same 30-day interval, there should not be greater than a ten percent excursion of the statistical threshold value of 208 cfu per 100 mL.

730 - Public and private water supplies

- (3) **Coliform bacteria.**
 - (A) The bacteria of the total coliform group shall not exceed a monthly geometric mean of 5,000/100 mL at a point of intake for public or private water supply.
 - (B) The geometric mean will be determined by multiple tube fermentation or membrane filter procedures based on a minimum of not less than **four (4) samples** taken over a period of not more than thirty (30) days.
 - (C) Further, in no more than 5% of the total samples during any thirty (30) day period shall the bacteria of the total coliform group exceed 20,000/100 mL.
 - (D) In cases where both public and private water supply and primary body contact recreation uses are designated, the primary body contact criteria will apply.

730 - Selenium

- **Appendix E:** “Site-specific criteria for selenium shall be developed using a BAF study approvable by DEQ. Prior to the start of any study, the workplan and appropriate quality assurance project plan need to be approved by DEQ. A site-specific BAF study requires both fish tissue (muscle or whole-body) and water column data.”
- Conversion Factor of 1 for Total to Dissolved Fractions for chronic criteria (**Appendix G, Table 3**)
- Removed acute criterion (**Appendix G**) - EPA did not develop an acute criterion for selenium when it updated the chronic criterion. Although selenium may cause acute toxicity at high concentrations, the most deleterious effects on aquatic organisms are due to selenium’s bioaccumulative properties

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Appendix G,

Table 4

Media Type	Fish Tissue ¹	Water Column ³	
Criterion Element	Egg/Ovary or Fish Whole-body or Muscle ²	Monthly Average Exposure	Intermittent Exposure ⁴
Magnitude	15.1 mg/kg dry weight (egg/ovary) or 8.5 mg/kg dry weight whole-body or 11.3 mg/kg dry weight muscle (skinless, boneless fillet)	1.5 µg/L in lakes aquatic systems 3.1 µg/L in rivers/streams aquatic systems	WQC_{int} $= \frac{WQC_{30-day} - C_{bkgnd}(1 - f_{int})}{f_{int}}$
Duration	Instantaneous measurement ⁵	30 days	Number of days/month with an elevated concentration
Frequency	Not to be exceeded	Not more than once in three years on average	Not more than once in three years on average

1. Fish tissue elements are expressed as steady-state.
2. Egg/ovary supersedes any whole-body, muscle, or water column element if fish egg/ovary concentration data are available, except as noted in footnote 3 below. Fish whole-body or muscle tissue supersedes water column element when both fish tissue and water concentrations are measured, except as noted in footnote 3 below.
3. Water column values are based on dissolved total selenium (TDSe) in water and are derived from fish tissue values via bioaccumulation modeling. When selenium inputs are increasing, water column values are the applicable criterion element in the absence of steady-state condition fish tissue data.
4. Where WQC_{30-day} is the water column monthly element for either lake or river/stream waters; C_{bkgnd} 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 1 day).
5. Fish tissue data provide instantaneous point measurements that reflect integrative accumulation of selenium over time and space in fish population(s) at a given site.

730 Selenium

2.1 Summary of the BAF Approach

A bioaccumulation factor (BAF) is the ratio (in milligrams/kilogram per milligrams/liter, or liters per kilogram) of the concentration of a chemical in the tissue of an aquatic organism to the concentration of the chemical dissolved in ambient water at the site of sampling (U.S. EPA 2001c). BAFs are used to relate chemical concentrations in aquatic organisms to concentrations in the ambient media of aquatic ecosystems where both the organism and its food are exposed and the ratio does not change substantially over time. The BAF is expressed mathematically as:

$$BAF = \frac{C_{tissue}}{C_{water}} \quad (Equation K-8)$$

Where:

BAF	=	bioaccumulation factor derived from site-specific field-collected samples of tissue and water (L/kg)
C_{tissue}	=	concentration of chemical in fish tissue (mg/kg)
C_{water}	=	ambient concentration of chemical in water (mg/L)

The site-specific BAF can then be applied to the tissue criterion to solve for a target site-specific water column criterion (C_{target}):

$$C_{target} \times \frac{C_{egg-ovary\ criterion}}{BAF} \quad (Equation K-9)$$

Where:

C_{target}	=	site-specific water criterion concentration (mg/L)
$C_{egg-ovary\ criterion}$	=	national egg-ovary tissue criterion (15.1 mg Se/kg dw)
BAF	=	bioaccumulation factor derived from site-specific field-collected samples of tissue and water (L/kg)

730 Selenium

2.1.1 Example: Derivation of a site specific water column criterion for a waterbody impacted by selenium

Available data for a hypothetical site indicate that the average egg/ovary tissue concentration of selenium for the bluegill (*Lepomis macrochirus*) is 22 mg/kg (dw). This concentration exceeds the USEPA proposed egg/ovary criterion of 15.1 mg/kg (dw). The ambient selenium water column concentration at that hypothetical site is 4.0 µg/L. The following calculation shows how to derive a target water column that would achieve a site-specific criterion using the bioaccumulation factor (BAF) approach.

Site specific selenium egg/ovary concentration (bluegill; mg/kg dw)	22.0
Selenium egg/ovary criterion (mg/kg, dw)	15.1
Ambient selenium water column concentration (µg/L)	4.0
Target water column concentration (µg/L)	X

Set up proportional equation to solve for allowable water column concentration:

$$\frac{\text{Site specific egg/ovary conc. } (\frac{mg \text{ Se}}{kg \text{ dw}})}{\text{Site specific water concentration } (\frac{\mu g \text{ Se}}{L})} = \frac{\text{Criterion egg ovary conc. } (\frac{mg \text{ Se}}{kg \text{ dw}})}{\text{Target water concentration } (\frac{\mu g \text{ Se}}{L})}$$

Solve for the target water concentration that will achieve a site-specific criterion:

$$\frac{22.0 (\frac{mg \text{ Se}}{kg \text{ dw}})}{4.0 (\frac{\mu g \text{ Se}}{L})} = \frac{15.1 (\frac{mg \text{ Se}}{kg \text{ dw}})}{\text{Target water concentration } (\frac{\mu g \text{ Se}}{L})}$$

Target water concentration = 2.75 µg/L.

730 - Updates to Appendix G, Table 2

PARAMETER	CAS #	Fish & Wildlife Propagation		Public & Private Water Supply (Raw Water)	Fish Consumption (+ Other Organisms) and Water	Fish Consumption (+ Other Organisms)
		ACUTE	CHRONIC			
		ug/L	ug/L	ug/L	ug/L	ug/L
Antimony	7440360				5.6	640
Asbestos	1332214				7 million fibers/liter	
Barium	7440393			1000	1000	
1,1,2,2,-Tetrachloroethane	79345				2	30
1,1,2-Trichloroethane	79005				5.5	89
2,4-Dinitrotoluene	121142				0.49	17
2-Chloronaphthalene	91587				800	1000
Alpha-Endosulfan	959988	0.22 (Footnote 1)	0.056 (Footnote 1)		20	30
Alpha-Hexachlorocyclohexane	319846				0.0036	0.0039
Benzo(a)pyrene	50328				0.0012	0.0013
Benzo(b)fluoranthene	205992				0.012	0.013
Beta-Endosulfan	33213659	0.22 (Footnote 1)	0.056 (Footnote 1)		20	40
Beta-Hexachlorocyclohexane	319857				0.08	0.14
Bis(2-chloro-1methylethyl) Ether	108601				200	4000
Bis(2-chloroethyl) Ether	111444				0.3	22
Bis(chloromethyl)ether	542881				0.0015	0.17
Bromoform	75252				70	1200

730 - Updates to Appendix G, Table 2

PARAMETER	CAS #	Fish & Wildlife Propagation		Public & Private Water Supply (Raw Water)	Fish Consumption (+ Other Organisms) and Water	Fish Consumption (+ Other Organisms)
		ACUTE	CHRONIC			
		ug/L	ug/L	ug/L	ug/L	ug/L
Carbaryl	63252	2.1	2.1			
Chlorobenzene	108907				100	800
Chrysene	218019				1.2	1.3
4,4' -DDE	72559				0.00018	0.00018
Dibenzo(a,h) anthracene	53703				0.0012	0.0013
Dinitrophenols	25550587				10	1000
Endosulfan Sulfate	1031078				20	40
Endrin Aldehyde	7421934				1	1
Fluoranthene	206440				20	20
Heptachlor Epoxide	1024573	0.52 (Footnote 1)	0.0038 (Footnote 1)		0.00032	0.00032
Hexachlorobutadiene	87683				0.1	0.1
Hexachlorocyclohexane (HCH)	608731				0.066	0.10
Indeno(1,2,3-cd) pyrene	193395				0.012	0.013
Nitrosodibutylamine	924163				0.063	2.2
Nitrosopyrrolidine	930552				0.16	340
Pentachlorobenzene	608935				0.1	0.1
Perchlorate	7601-90-3	6600 (Footnote 2)	1800 (Footnote 2)		5	
Tributyltin (TBT)		0.46	0.072			

730 – Appendix E

E. Site-Specific Criteria Development Options for Metals:

A proposal based on one or more of the site-specific criteria development options provided in this appendix may be submitted to DEQ for potential adoption. Prior to the initiation of any work toward development of a site-specific criterion, interested parties must coordinate with DEQ technical staff. Such coordination will require, at a minimum, a workplan addressing project goals, sample collection and testing methods, quality assurance measures, and output schedules. This workplan will need to be reviewed and approved by DEQ and the permitting authority prior to initiation of any work.

The methods provided in this appendix are to be used to develop site-specific metals criteria for permitting purposes as an alternative to utilizing the total recoverable criteria referenced in OAC 252:730-5-12(f)(6)(G) and Table 2 of Appendix G. The results of a site-specific criteria development study will be approved if shown to be scientifically defensible and adequately protective of the waterbody's beneficial uses.

730 – Appendix E

1. Method 1: Copper Biotic Ligand Model

The BLM for copper uses inputs for ten water chemistry parameters (pH, dissolved organic carbon, calcium, magnesium, sodium, sulfate, potassium, chloride, alkalinity, and temperature) to determine site-specific dissolved copper criteria that are more representative of toxicity to aquatic life than other models. This method for the calculation of site-specific criteria reflects the best available science for determining biologically available copper. Further information about the model can be found in the document “Aquatic Life Ambient Freshwater Quality Criteria - Copper 2007 Revision” (EPA-822-R-07-001).

730 – Appendix E

5. Method 5: Selenium BAF Fish Tissue Study

Site-specific criteria for selenium shall be developed using a BAF study approvable by DEQ. Prior to the start of any study, the workplan and appropriate quality assurance project plan need to be approved by DEQ. A site-specific BAF study requires both fish tissue (muscle or whole-body) and water column data.

6. Method 6: Multiple Linear Regression Model

A Multiple Linear Regression model, or other scientifically defensible criteria development model, may be utilized to develop site-specific criteria for copper. The entity requesting the site-specific criterion must provide sufficient justification for the use of the model subject to DEQ's discretion.

Other revisions

- Appendix E: Site-specific criteria that were not approved by EPA
 - City of Idabel/Mud Creek: copper
 - City of Poteau/Poteau River: cadmium, silver, lead
- Appendix F: Removal of some segments
 - Criteria not approved by EPA

740 - Definitions

- **“Continuous discharge”** means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.
- **“Selenium fish tissue study”** means a study designed to assess selenium concentrations in fish tissue to determine if fish tissue concentrations are in compliance with state tissue criteria, determine reasonable potential, and/or to derive a site-specific water column criterion element using a translator. Prior to conducting a fish tissue study, a workplan and quality assurance project plan shall be submitted to and approved by DEQ.
- **“Steady-state”** refers to an aquatic ecosystem where the inputs are stable, and the bioaccumulation of toxins or inputs have reached homeostasis within organisms in the system. DEQ will require a waiting period of 6-months in rivers and streams, and 3-years in lakes following any major changes to system inputs or discharges.

252:740-1-6. Determination of regulatory low flow**(a) General.**

(1) **7Q2.** The 7Q2 is calculated as a moving average of seven consecutive days for each year in a given record. These seven-day low flow values are ranked in ascending order. An order number (m) is calculated based upon the number of years of record (n), with a recurrence interval (R) of two years, as $m = (n+1)/R$, where $R = \text{two years}$. A value of flow corresponding to the mth order is taken as the seven-day, two-year low flow for those historical data.

(2) **Seasonal 7Q2.** The seasonal 7Q2 is calculated as a moving average of seven consecutive days for the applicable dates specified in Table 1 of Appendix G of OAC 252:730 in a given period of record. These seven-day low flow values are ranked in ascending order. An order number (m) is calculated based upon the number of seasons (n) specified in Table 1 of OAC 252:730 Appendix G during the period of record, with a recurrence interval (R) of two years, as $m = (n+1)/R$, where $R = \text{two years}$. A value of flow corresponding to the mth order is taken as the seasonal seven-day, two-year low flow for those historical data.

(3) **30Q2.** The 30Q2 is calculated as a moving average of thirty consecutive days for each year in a given record. These thirty-day low flow values are ranked in ascending order. An order number (m) is calculated based upon the number of years of record (n), with a recurrence interval (R) of two years, as $m = (n+1)/R$, where $R = \text{two years}$. A value of flow corresponding to the mth order is taken as the thirty-day, two-year low flow for those historical data.

- **252:740-5-3. Reasonable potential**

- (c) **Selenium**

- (1) If the permitting authority has site-specific, steady-state fish tissue data that were collected under and met appropriate quality-assurance procedures, those data shall be used to determine reasonable potential. If there is no excursion of the selenium fish tissue criterion element, it shall be determined that there is no reasonable potential. If fish tissue data exceed the selenium fish tissue criterion element, a WQBEL shall be established based on a site-specific water column criterion element developed using a translator.
 - (2) Unless and until a selenium fish tissue study has been completed, the permitting authority shall use the water column criterion element to determine reasonable potential.
 - (3) Where the permitting authority has information that there are substantial new, known inputs or releases that would affect selenium concentrations in fish relative to environmental concentrations, the fish tissue will not be considered as being in steady-state with respect to selenium, and fish tissue criterion elements shall not be used to assess permit compliance or as permit limits. In these cases, the water column criterion element shall be used to assess reasonable potential and develop selenium WQBELs.
 - (4) For a continuous discharge, when using a water column criterion element to evaluate reasonable potential, the permitting authority shall use the 30-day chronic criterion element set forth in OAC 252:730 Appendix G, Table 4.

- **252:740-15-5. Assessment of Fish and Wildlife Propagation support**

- (h) **Metals.**

- (1) For all metals unless otherwise specified in this subsection, the Fish and Wildlife Propagation beneficial use designated for a waterbody may be assessed using either total recoverable or dissolved metals. When available, the concentrations of dissolved metals shall be compared following the provisions of (c) of this subsection to the criteria in OAC 252:730 Appendix G converted to dissolved criteria by multiplying the total metal criterion listed in Table 2 by the appropriate conversion factor listed in Table 3. Preference shall be given to the beneficial use determinations based upon dissolved metals. For those metals criteria requiring a hardness component, individual assessment results may be calculated using the average of all hardness data meeting the requirements of OAC 252:740-15-3. The segment-averaged hardness in Appendix B of this Chapter shall be used in the determination of the criterion if there is insufficient site-specific data to determine stream hardness.

- (2) For selenium, the Fish and Wildlife Propagation beneficial use designated for a waterbody shall use fish tissue data as the preferred method for assessment and listing purposes if such data are adequate and available. The criteria are established in OAC 252:730 Appendix G, Table 4. In the absence of fish tissue data, either monthly average exposure or intermittent exposure water column criteria may be used. The intermittent exposure criterion element can only be exceeded under the same conditions that would have caused the monthly average exposure criterion element to be exceeded. Thus, evaluating data against the intermittent exposure criterion element and the monthly average exposure criterion element will always result in the same assessment decision. OAC 252:740-15-5(h)(2) provides for the implementation of fish tissue criterion elements and fish tissue studies for the protection of the Fish and Wildlife Propagation beneficial use as an alternative to water column-based criterion. All selenium fish tissue studies shall be approved by DEQ.

252:740-15-13. Assessment of Secondary Body Contact Recreation support [NEW]

(a) **Scope.** The provisions of this Section shall be used to determine whether the subcategory of Secondary Body Contact of the beneficial use of Recreation designated in OAC 252:730 for a waterbody is supported. Where data exist for multiple bacterial indicators on the same waterbody or waterbody segment, the determination of use support shall be based upon the use and application of all applicable tests and data.

(b) ***Escherichia coli* (*E. coli*).**

(1) The Secondary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be fully supported with respect to *E. coli* if the geometric mean of 242 cfu per 100 mL is met. These values are based upon all samples collected in accordance with OAC 252:740-15-3(c).

(2) The Secondary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be not supported with respect to *E. coli* if the geometric mean of 242 cfu per 100 mL is not met. These values are based upon all samples collected in accordance with OAC 252:740-15-3(c).

(c) **Enterococci.**

(1) The Secondary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be fully supported with respect to enterococci if the geometric mean of 63 cfu per 100 mL is met. These values are based upon all samples collected in accordance with OAC 252:740-15-3(c).

(2) The Secondary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be not supported with respect to enterococci if the geometric mean of 63 cfu per 100 mL is not met. These values are based upon all samples collected in accordance with OAC 252:740-15-3(c).

252:740-15-6. Assessment of Primary Body Contact Recreation support

(a) **Scope.** The provisions of this Section shall be used to determine whether the subcategory of Primary Body Contact of the beneficial use of Recreation designated in OAC 252:730 for a waterbody is supported during the recreation season from May 1 through September 30 each year. The criteria for Secondary Body Contact Recreation will apply during the remainder of the year. Where data exist for multiple bacterial indicators on the same waterbody or waterbody segment, the determination of use support shall be based upon the use and application of all applicable tests and data.

Questions?



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