I. PROCEDURAL HISTORY

On June 30, 2021, Teck Coal Limited (“Teck”) petitioned the Board of Environmental Review (“Board” or “BER”) under § 75-5-203, MCA (the “Stringency Statute”), to determine whether Administrative Rules of Montana (ARM) 17.30.632(7)(a) (the “Lake Numeric Standard”), which sets a water column standard for selenium in Lake Koocanusa of 0.8 micrograms per liter, is more stringent than the comparable federal guideline. On October 14, 2021, the Board of County Commissioners of Lincoln County (“Lincoln County”) filed a similar petition with the Board. The Board consolidated the two petitions (collectively, the “Petitions”) and determined, with Teck’s waiver, that the eight-month period provided in § 75-5-203(4)(a), MCA, would commence on October 14, 2021, the
date Lincoln County filed its petition. The rulemaking record that culminated in the promulgation of the Lake Numeric Standard (the “Record” or “RR”) was compiled and made available to the public and the Board on December 15, 2021.\footnote{The Record or “RR” can be found on the BER Website under the Selenium Rule Review “Record Supporting the Promulgation of ARM 17.30.632” \url{https://deq.mt.gov/files/DEQAdmin/BER/Documents/Record.pdf}}

The Board requested submission of written comments addressing the issues presented by the Petitions by January 13, 2022. The Board received comments from the Idaho Conservation League; the Confederated Salish and Kootenai Tribes, together with the Kootenai Tribe of Idaho (collectively, the “Tribes”); Lincoln County; the Montana Department of Environmental Quality (“DEQ” or the “Department”); the Montana Environmental Information Center together with the Clark Fork Coalition (collectively, “MEIC/CFC”); the U.S. Environmental Protection Agency (“EPA”); Montana Trout Unlimited; the Montana Mining Association; the Treasure State Resources Association of Montana; Wildsight; and Teck. The Board requested that responsive comments be submitted by January 21, 2022. The Board received responses from Teck, DEQ, EPA, and Lincoln County.

On January 31, 2022, the Board held a public hearing to receive oral comments on the Petitions. Oral comments were received from Montana Senator Mike Cuffe (Senate District 1); Teck; Lincoln County; Mr. John O’Connor from
Bonners Ferry, Idaho; Lincoln County Commissioner Jerry Bennett; Lincoln County Commissioner Josh Letcher; EPA; DEQ; the Tribes; the Idaho Conservation League; MEIC/CFC; Wildsight; Idaho Rivers United; Ms. Erin Sexton; Montana Trout Unlimited; Ms. Lexie Defremery from Bonner County, Idaho; Ms. Becca Rodack from Boundary County, Idaho; and the British Columbia and Montana chapters of the Back Country Hunters and Anglers. A transcript of the public hearing was made available to the Board. The Board requested proposed decision documents by February 11, 2022, and received proposed documents from DEQ, MEIC/CFC, and Teck.

After detailed consideration and analysis of the records, documents, transcripts, and comments; and the relevant rules, statutes, and other authorities; and after in-depth deliberations at its February 25 and April 8, 2022 meetings; the Board makes the following Findings of Fact and Conclusions of Law.

II. FINDINGS OF FACT

1. The controlling statute is § 75-5-203, MCA, the Stringency Statute, which reads in relevant part, following its amendment in 2021:

   State regulations no more stringent than federal regulations or guidelines. (1) Except as provided in subsections (2) through (5) …. the department [previously board] may not adopt a rule to implement 75-5-301, 75-5-302, 75-5-303, or 75-5-310 that is more stringent than the comparable federal regulations or guidelines that address the same circumstances. …
(2) The department [previously board] may adopt a rule to implement this chapter that is more stringent than comparable federal regulations or guidelines only if the department [previously board] makes a written finding after a public hearing and public comment and based on evidence in the record that:

(a) the proposed state standard or requirement protects public health or the environment of the state; and

(b) the state standard or requirement to be imposed can mitigate harm to the public health or environment and is achievable under current technology.

(3) The written finding must reference pertinent, ascertainable, and peer-reviewed scientific studies contained in the record that forms the basis for the department's [previously board’s] conclusion. The written finding must also include information from the hearing record regarding the costs to the regulated community that are directly attributable to the proposed state standard or requirement.

(4) (a) A person affected by a rule that the person believes to be more stringent than comparable federal regulations or guidelines may petition the board to review the rule. If the board determines that the rule is more stringent than comparable federal regulations or guidelines, the department [previously board] shall comply with this section by either revising the rule to conform to the federal regulations or guidelines or by making the written finding, as provided under subsection (2), within a reasonable period of time, not to exceed 8 months after receiving the petition….

2. Upon request of DEQ, acting under its authority provided in §§ 75-5-201 and 75-5-301, MCA, the Board initiated rulemaking of the new selenium rules (ARM 17.30.632), including the Lake Numeric Standard, by publication in the Montana Administrative Register on October 9, 2020. RR 000044 (9/24/20 BER Mtg. Agenda); RR 001326-31 (10/09/20 Notice to Hold Hr’g on Prop. Amend. ARM 17.30.602 and ARM 17.30.632).
3. In conjunction with its request for rulemaking, DEQ advised the Board that the Lake Numeric Standard is not more stringent than the EPA recommended criteria because it was “developed using federally-recommended site-specific procedures.” RR 000001-2 (9/09/20 Mem. from Kirsten H. Bowers [DEQ Att’y] to BER). The Board’s initiation of rulemaking for the Lake Numeric Standard adopted DEQ’s conclusion asserting that “[t]he proposed Lake Koocanusa water column standard (30-day chronic) is no more stringent than the recommended EPA 304(a) criteria because it was developed using federally recommended site-specific procedures; therefore, it is more accurate than the generally applicable national lentic (lake) number.” RR 001330 (19 Mont. Admin. Reg., 1793 (Oct. 9, 2020)) (emphasis added). Thus, DEQ and the Board rejected the “generally applicable national lentic (lake) number” as the comparable federal guideline. The Board relied on DEQ’s conclusion regarding stringency throughout the rulemaking. RR 002333-2334, 2422, 2427 (12/11/20 BER Transcript); RR 002544-45 (12/24/20 Notice of Amend. and Adoption for ARM 17.30.602 and ARM 17.30.632 in Mont. Admin. Reg.).

5. Regarding stringency of the Lake Numeric Standard compared to the federal guideline, the Board’s final promulgation stated that the Lake Numeric Standard was not more stringent than the federal guideline because “[t]he proposed water column standard for Lake Koocanusa (0.8 µg/L) is based on EPA 304(a) fish tissue criteria and site-specific bioaccumulation modeling, following the site-specific procedures set forth by EPA in its current 304(a) guidance.” RR 002544-45 (12/24/20 Notice of Amend. and Adoption for ARM 17.30.602 and ARM 17.30.632 in Mont. Admin. Reg.). Because the Board concluded that the Lake Numeric Standard was not more stringent than the federal guideline, it also concluded that it “is not required to make written findings required by § 75-5-203(2), MCA.” Id.

6. The Petitions sought the Board’s review of the Lake Numeric Standard pursuant to the Stringency Statute to determine if it is more stringent than the comparable federal guideline that addresses the same circumstances and, if it is, whether the Stringency Statute’s requisite findings had been or could be made based on the Record and whether the rulemaking publications complied with the Stringency Statute. ²

7. Teck is a company conducting coal mining operations in the Elk Valley area in British Columbia. Teck’s Elk Valley operations are subject to regulation by British Columbia pursuant to, among other laws, Ministerial Order No. M113, the 2014 Elk Valley Water Quality Plan, and Permit 107517 issued to Teck by the B.C. Ministry of Environment under the B.C. Environmental Management Act. Permit 107517 includes selenium water quality compliance limits and site performance objectives for Teck’s discharges that eventually enter the Elk River, which is a tributary to Lake Koocanusa. RR 000087-88, 91-92, 94-99 (9/2020, DEQ, Derivation of a Site-Specific Water Column Selenium Standard for Lake Koocanusa (“DEQ Derivation Doc.”); see also Teck Petition, pp. 14-15.

8. Teck participated in collaborative efforts, initiated by Teck’s Canadian regulators, to consider whether British Columbia’s Water Quality Objective of 2.0 micrograms per liter is protective of Lake Koocanusa. DEQ participated in the collaborative efforts. Some of the information and data used, developed, and considered during that process, including information and data provided by Teck, are referenced and relied upon in the technical support documents that serve as the basis for the new rule, ARM 17.30.632. Id.

9. Teck participated in the rulemaking for ARM 17.30.632 by attending public meetings, submitting formal written comments and delivering oral comments at public meetings, including the November 5, 2020 public hearing. RR 001269-73 (9/24/20 BER Transcript); RR 001465-71 (11/5/20 BER Transcript); RR 001894-2091 (11/23/20 Teck Comment Letter). Teck’s comments included its assertion that the Lake Numeric Standard failed to comply with the Stringency Statute. Id.

10. On December 31, 2020, DEQ Director McGrath wrote to the International Joint Commission, which has authority to enforce the Boundary Waters Treaty, requesting action against transboundary pollution stemming from Elk River valley mining operations. Teck Petition, Ex. D.

11. On December 11, 2020, DEQ Director McGrath testified before the Board that “[b]y us adopting this standard today, what that does is continue to put the pressure on British Columbia to indeed adopt their own standard that is aligned with us.” RR 002402 (12/11/20 BER Transcript).

12. The Board of County Commissioners of Lincoln County is a political subdivision of the State of Montana. That portion of Lake Koocanusa located in the United States is within Lincoln County. Lincoln County Petition, p. 14.

13. Lincoln County participated in the rulemaking for ARM 17.30.632 by attending public meetings, submitting formal written comments, and delivering
oral comments at public meetings. RR 001796-1801 (Lincoln County Comment Letter); RR 001439-1443 (11/5/20 BER Transcript).

14. When promulgating the Lake Numeric Standard, the Board “recognize[d] that the lake will probably be considered impaired for selenium.” RR 002505 (20 Mont. Admin. Reg. 2359 (12/24/20)).

15. When promulgating the Lake Numeric Standard, the Board noted that if Lake Koocanusa is listed as impaired for selenium, “then new projects would need to discharge at concentrations equal to or less than the proposed standard of 0.8 [micrograms per liter].” RR 002497 (20 Mont. Admin. Reg. 2351 (12/24/20)).

16. There is no federal standard for selenium, but there is a federal guideline. RR 000306 (2016 EPA Guideline, explaining the distinction between a CWA Section 304(a)(1) guideline, which “represents a non-regulatory, scientific assessment of ecological effects” and a water quality standard which is associated with a specific designated use and adopted by a state or tribe).

17. On July 13, 2016, EPA announced the release of final updated guidelines to states and tribes for selenium. 81 Fed. Reg. 45285-86 (7/13/16). “EPA’s recommended water quality criteria are scientifically derived numeric values that protect aquatic life or human health from the deleterious effects of pollutants in ambient water.” Id. For selenium in lentic water (still or slow-moving fresh water), EPA recommends a water column numeric value of 1.5 micrograms per
liter (the “EPA National Lake Numeric Guideline”); a fish whole body tissue numeric value of 8.5 mg/kg dw; a fish muscle tissue numeric value of 11.3 mg/kg dw; and a fish egg/ovary numeric value of 15.1 mg/kg dw. *Id.*; RR 000313 (EPA, *Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater 2016*, Table 1).

18. The 2016 EPA Guideline was “derived for the protection of 95% of species nation-wide,” specifically including white sturgeon in the Kootenai River, from impacts of selenium, including selenium released by “resource extraction activities.” RR 000090 (DEQ Derivation Doc.); RR 000320, 455-456 (2016 EPA Guideline). Appendix K to the 2016 EPA Guideline provides suggested models (the “EPA Site-Specific Models”) for use by states and tribes if they choose to deviate for specific sites from the generally applicable national guideline. RR 001035-78 (2016 EPA Guideline, Appendix K). The “site-specific procedures” referenced by DEQ and the Board (*see* Findings of Fact ¶3 and ¶5 *supra*) are the EPA Site-Specific Models. RR 002544-45 (24 Mont. Admin. Reg. 2398-99 (12/24/20); BER Hr’g Tr. (“Jan. 31 Hearing”) 30:1-8 (1/31/22).

19. The EPA Site-Specific Models consist of complicated mathematical formulas using assumptions and inputs determined by the user. The user has discretionary latitude in selecting the assumptions and inputs and changes in the
assumptions and inputs of course change the result. *Id.;* RR 002544-45 (24 Mont. Admin. Reg. 2398-99 (12/24/20)); RR 000078-119 (DEQ Derivation Doc.).

20. The new selenium rules provide “[n]umeric selenium standards,” including a “water column standard” for Lake Koocanusa of 0.8 micrograms per liter: the Lake Numeric Standard. ARM 17.30.632.


22. Using an EPA Site-Specific Model, the Lake Numeric Standard was supported by modeling scenarios that use a whole-body fish tissue threshold of 5.6 mg/kg dw, which is more stringent than the federally recommended level of 8.5 mg/kg dw. RR 000127 (DEQ Derivation Doc.). As stated by DEQ testimony to the Board, “the 5.6 was used as an input to come up with a water column value of .8.” RR 001251 (testimony of Myla Kelly, DEQ Manager of Water Quality Standards and Modeling Section, 9/24/20 Board Transcript). A model scenario using the federally recommended level of 8.5 mg/kg dw was also presented, but that scenario altered other model inputs (bioavailability and Kd percentile) to be more “conservative” (i.e., more stringent). RR 00125-27 (DEQ Derivation Doc.).

23. In its rationale for approval of the new selenium rule, EPA noted that the Lake Numeric Standard “is more stringent than the recommended water column
criterion element for lentic aquatic systems in EPA 2016 (1.5 μg/L).” Teck Petition, Exhibit B (EPA Letter to Board, EPA Rationale (February 25, 2021), p. 12 (pdf p. 15) n. 22; see also p. 2 (pdf p. 5), n. 6; p. 6 (pdf p. 9), n.11).

24. Concerned that “Montana must simultaneously move toward reducing redundant and unnecessary regulation that dulls the state’s competitive advantage while being ever vigilant in the protection of the public’s health, safety, and welfare,” the Montana Legislature enacted House Bill 521 in 1995, which was codified as the Stringency Statute. Mont. HB 521, 54th Leg. (1995).

25. In enacting House Bill 521, the Legislature intended that the agency promulgating a standard or requirement must “include as part of the initial publication and all subsequent publications a written finding if the rule in question contains any standards or requirements that exceed the standards or requirements imposed by comparable federal law.” Id.

26. The Legislature intended that the “written finding must include but is not limited to a discussion of the policy reasons and an analysis that supports the board’s or department’s decision that the proposed state standards or requirements protect public health or the environment of the state and that the state standards or requirements to be imposed can mitigate harm to public health or the environment and are achievable under current technology.” Id.
27. Based on the Board’s conclusion that the Lake Numeric Standard was not more stringent than the comparable federal guideline, the Board did not make the written findings required by § 75-5-203, MCA, when it promulgated the Lake Numeric Standard. RR 002544-45 (24 Mont. Admin. Reg. 2398-99 (12/24/20)) and it did not have reason to include in the Record evidence specifically to support such findings. *Id.* Whether the Record contains such evidence is questionable. Teck Comments pp. 16-24 (1/13/22).

28. Teck and the Lincoln County argue that the Stringency Statute requires peer-reviewed studies to support the findings required by the statute. Teck Petition p. 2; Lincoln County Petition p. 2. DEQ argues to the contrary. DEQ Comments p.11-13 (1/13/22).

III. CONCLUSIONS OF LAW

1. This matter regards compliance with the Stringency Statute, not whether the Lake Numerical Standard is the appropriate standard.

2. The Board is an “agency” an “entity or instrumentality of the executive branch of state government.” Section 2-15-102(2), MCA.

3. Pursuant to § 2-15-3502(4), MCA, the Board serves a “quasi-judicial function,” which is defined as “an adjudicatory function exercised by an agency, involving the exercise of judgment and discretion in making determinations in controversies.” Section 2-15-102(10), MCA. This includes “interpreting,
applying, and enforcing existing rules and laws” and “evaluating and passing on facts.” *Id.*

4. One such issue that the law places within the Board’s authority is, upon petition, to review a rule pursuant to the Stringency Statute. Therefore, the Board has a statutory duty to consider the Petitions and issue final agency action on them. Section 75-5-203(4)(a), MCA.

5. Prior to July 1, 2021, setting water quality standards—including the Lake Numeric Standard—was solely within the Board’s authority. Section 75-5-301(2), MCA (2019); 2021 Mt. SB 233; § 75-5-301(2), MCA (2021). Pursuant to that authority, the Board created the Record and promulgated the Lake Numeric Standard. (*See* Findings of Fact ¶¶ 2-4 *supra*).

6. Administrative standing determinations made by quasi-judicial agencies (such as the Board) depend “on the language of the statute and regulations which confer standing before that agency.” *Williamson v. Mont. PSC*, 2012 MT 32, ¶ 30, 364 Mont. 128, 272 P.3d 71, 82. Administrative standing “may permissibly be less demanding than the criteria for judicial standing.” *Id.* In this case, the statute that confers standing requires that the person be “affected by” the Lake Numeric Standard. Section 75-5-203(4)(a), MCA. The statute does not condition the amount or type of effect required. It simply requires that the person be “affected by” the Lake Numeric Standard. A “person” is defined in the Montana Water
Quality Act to include a “firm, corporation, partnership, individual, or other entity and includes persons resident in Canada.” Section 75-5-103(26), MCA.

7. Teck’s Petition and the Record demonstrate that it is affected by the Lake Numeric Standard because its Canadian coal mining operations, monitoring data and other information, and the regulatory requirements placed upon it by provincial and Canadian authorities were used during rulemaking. The Lake Numeric Standard was aimed at Teck and was immediately used by DEQ in a manner adverse to Teck. See Findings of Fact ¶¶ 7-11 supra.

8. Lincoln County’s Petition and the Record demonstrate that it is affected by the Lake Numeric Standard because Lake Koocanusa is in Lincoln County and, as the Board recognized, an impairment listing of the lake is probable and would impact discharge limitations for new projects in Lincoln County. See Findings of Fact ¶¶ 12-15 supra.

9. The Lake Numeric Standard is a water quality standard subject to the Stringency Statute. See Findings of Fact ¶¶ 21, 25 supra; ARM 17.30.632(7); § 75-5-302, MCA.

10. The EPA National Lake Numeric Guideline is “comparable” to and “address[es] the same circumstances” as the Lake Numeric Standard because both are definitive numeric criteria, both address the same “particular parameter,” which is selenium, both address lentic/lake waters, and both aim to protect aquatic life

11. In *Pennaco*, the Court held that the Stringency Statute is “triggered only when EPA has promulgated a federal regulation, guideline or criteria addressing the particular parameter involved” and since the parties agreed “there [were] no national numeric criteria for [the particular parameters involved],” the statute was not triggered. 2007 Mont. LEXIS at *44 (Dist. Ct. reasoning upheld 347 Mont. at 428, 199 P.3d at 200). In the present case, the Stringency Statute is triggered by the EPA National Lake Numeric Guideline. See Findings of Fact ¶ 17 supra.

12. DEQ’s theory that the EPA National Lake Numeric Guideline is not the “comparable” guideline on the grounds that the Lake Numeric Standard is site-specific fails, not only because it is contrary to the plain statutory language, but also because this argument would render the Stringency Statute a nullity as to site-specific rules which is directly contrary to the express terms of the statute making it applicable to site-specific standards. Section 75-5-203(1), MCA (specifically stating its applicability to standards set pursuant to § 75-5-310, MCA, which allows site specific standards). Also, this argument would be counter to the intent

13. The Lake Numeric Standard is mathematically lower and thus more stringent than the comparable federal guideline (the EPA National Lake Numeric Guideline). *See* Findings of Fact ¶¶ 17, 20 *supra*. The Board erred when it determined that the Lake Numeric Standard is not more stringent than the comparable federal guideline. Section 75-5-203(1), MCA.

14. While the EPA lacks authority under Montana’s Stringency Statute, its conclusion that the Lake Numeric Standard “is more stringent than the recommended water column criterion element for lentic aquatic systems in EPA 2016 (1.5 μg/L) [the EPA National Lake Numeric Guideline]” is confirming evidence that the comparable federal guideline is the EPA National Lake Numeric Guideline. *See* Findings of Fact ¶ 23 *supra*.

15. The EPA Site-Specific Models are not “comparable” to the Lake Numeric Standard because the Lake Numeric Standard is a definitive numeric water quality standard while the EPA Site-Specific Models consist of complicated mathematical formulas using assumptions and inputs determined by the user who has discretionary latitude in selecting the assumptions and inputs and changes in the assumptions and inputs change the result. *See* Findings of Fact ¶¶ 19-20 *supra*. 
The Board erred when it treated the EPA Site-Specific Models as comparable to the Lake Numeric Standard. Section 75-5-203(1), MCA.

16. Although the EPA Site-Specific Models are not the comparable guideline, it is significant to note that the modeling conducted by DEQ to determine the Lake Numerical Standard used an input criterion more stringent than the federal guideline, thus, rendering the Lake Numerical Standard more stringent even under DEQ’s theory. See Findings of Fact ¶ 22 supra.

17. No written findings were provided by the Board for the Lake Numeric Standard. Written findings are required by the Stringency Statute under MCA §§ 75-5-203(2) and (3) when the standard is more stringent than the comparable federal guideline. Therefore, by not providing written findings the Board erred and the Lake Numeric Standard violates the Stringency Statute. See Findings of Fact ¶¶ 26-27 supra. Section 75-5-203(1), MCA.

18. Because the initial publication of the new selenium rules failed to inform the public that the Lake Numeric Standard is more stringent than the federal guideline and failed to provide the written findings required by the Stringency Statute for public review and comment, the rulemaking for the Lake Numeric Standard violates the Stringency Statute. Section 75-5-203, MCA; See Findings of Fact ¶¶ 3, 25 supra.
19. The Stringency Statute requires evidence in the rulemaking record supporting the required findings for a rule more stringent than the federal guideline. Sections 75-5-203(2) and (3), MCA. However, it is not necessary for the Board to determine now whether the Record contains the necessary evidence, because if DEQ determines to make the findings required by the Stringency Statute, DEQ must ensure that such evidence exists in the record. Section 75-5-203, MCA; See Findings of Fact ¶¶ 26-27 supra.

20. The Stringency Statute expressly requires “peer-reviewed scientific studies” to support a more stringent than federal rule. Section 75-5-203(3), MCA. The legislative history supports this reading of the statute. See Minutes, MT. Senate, 54th Leg. Reg. Session, Comm. on Natural Resources, March 28, 1995, p. 5.

IV. ORDER

Based on the Board’s full consideration of the foregoing Findings of Fact and Conclusions of Law, and the supporting record, as well as arguments submitted, IT IS ORDERED that:

1. Teck and Lincoln County each has standing to bring its Petition.

2. The Lake Numeric Standard is more stringent than the comparable federal guideline.

3. The Board erred, as a matter of law, when it concluded the Lake Numeric Standard was not more stringent than the comparable federal
guideline and that it did not need to make the written findings required by §§ 75-5-203(2) and (3), MCA.

4. The Lake Numeric Standard and the rulemaking upon which it is based fail to comply with the Stringency Statute. Sections 75-5-203(1), (2) and (3), MCA.

5. The Stringency Statute sets forth the applicable remedy to be implemented by DEQ. Section 75-5-203(4)(a), MCA.

6. Because the Board’s rulemaking failed to comply with § 75-5-203, MCA, in order to have a valid and enforceable lake water column standard, new rulemaking must be initiated.

7. That this is the Final Agency Decision of the Board.

DATED this 19th day of April, 2022.

/s/ Steven Ruffatto
STEVEN RUFFATTO
Chairman
Board of Environmental Review