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Ref: 8EPR-EP 12/14/11

Walt Baker, Director
Division of Water Quality
Utah Department of Environmental Quality
PO Box 144870
Salt Lake City, UT 84114-4870

Re: Proposed Revisions to R317-2

Dear Mr. Baker:

This letter provides comments of the U.S. EPA Region 8 Water Quality Unit (WQU) on the proposed revisions to R317-2 (Standards of Quality for Waters of the State). Our review addresses the proposal and supporting information included in the public notice of proposed rulemaking published in the November 1, 2011 issue of the Utah State Bulletin (Volume 2011, No. 21). The proposed revisions include modifications to Utah's antidegradation policy, authorizing language for the adoption of site-specific standards, segment specific water quality standards, and new or revised criteria for several pollutants.

Overall, the WQU supports the proposed revisions to R317-2. Our comments are summarized below. Please note that the positions described in our comments, regarding both existing and proposed water quality standards, are preliminary in nature and should not be interpreted as final decisions under CWA § 303(c). The EPA approval/disapproval decisions will be made after adoption of water quality standards revisions and submittal to the EPA, and will consider all pertinent evidence including information submitted during the rulemaking process.

PROPOSED REVISIONS TO ANTIDEGRADATION (R317-2-3)

The Utah Division of Water Quality (UDWQ) proposes several revisions to R317-2-3 including:

- A revised description of temporary and limited for Category 1 waters that references R317-2-3.5.b.4;
- The addition of a temporary and limited provision for Category 2 waters; and
- Deletion of 317-2-3.5.b.1(d).

The proposed revisions to the temporary and limited provisions as they apply to Category 1 and 2 waters are consistent with the *EPA Region 8 Guidance: Antidegradation Implementation* and meet the requirements of 40 CFR § 131.12. Therefore, we are not opposed to the adoption of the revised language.

The WQU also supports UDWQ's proposal to delete 317-2-3.5.b.1(d). Deletion of this provision will resolve the 2010 disapproval action.[1] If the proposed revisions to R317-2-3 are approved by the Utah Water Quality Board (Board), the WQU will likely recommend approval of the revisions.

PROPOSED REVISIONS TO SITE-SPECIFIC STANDARDS PROVISION (R317-2-7; TABLE 2.14.1 & 2.14.2)

The UDWQ proposes revisions to R317-2-7 that will expand the situations where a site-specific standard may be adopted. As currently written, R317-2-7 only identifies TDS and temperature for the consideration of site-specific standards. There is no reason to limit site-specific standards to these two parameters. The EPA has identified several methods for developing site-specific standards that can be used for a wide variety of pollutants.[2] The proposed revisions remove the parameter specificity and allow for site-specific standards under the following two conditions: 1) where site-specific data or analyses indicate that the existing criterion is more or less stringent than necessary to protect the designated use or 2) where natural, human induced unalterable conditions or other factors identified by 40 CFR 131.10(g)[3] prevent attainment of the statewide criterion. Adoption of the proposed language will provide Utah the authority to develop and adopt site-specific standards with scientifically defensible methods for waterbodies where the state-wide standards are not appropriate.

PROPOSED REVISIONS TO INDIVIDUAL WATERBODIES (R317-2-12 & R317-2-13)

The UDWQ's proposal includes revisions to the antidegradation classification, use designations, and segment descriptions for several waterbodies. See Enclosure 1 for a complete list of the proposed revisions to individual waterbodies. Most of the proposed revisions are nonsubstantive changes and would not change the level of water quality protection; however, a few of the revisions upgrade and/or clarify the designated uses for water bodies that were previously unclassified (i.e., Red Butte Creek, Emigration Creek, Big East Lake, and Sand Hollow Reservoir) and other proposed revisions will upgrade the recreation use designation from 2B to 2A (i.e., Fremont and Ogden rivers) to better protect the existing recreation use. We commend the UDWQ for revising the use designations to better reflect the existing uses. Assigning correct designated uses is a necessary first step to establishing appropriate water quality standards for a particular waterbody. If adopted by the Board, these revisions will provide better protection to these aquatic resources.

PROPOSED REVISIONS TO NUMERIC CRITERIA (R317-2-14)

<u>Table 2-14-1 - Site Specific Standards for Total Dissolved Solids</u>

In its 2010 action letter, the EPA disapproved a revised segment description that relaxed the TDS criterion from 1,200 mg/L to 3,000 mg/L for a portion of the Price River and tributaries since no data or rationale were provided to support the application of the relaxed criterion. It is our understanding that the section of the Price River where the criterion was relaxed (from the confluence with Coal Creek to the confluence with Soldier Creek and tributaries) was accidentally excluded from the original site-specific TDS criteria proposal that was adopted by the Board. This resulted in a small segment of the

[1] EPA disapproved 317-2-3.5.b.1(d) in its action letter dated August 24, 2010.
[2] *Water Quality Standard Handbook: Second Edition*. EPA-823-B-94005a
[3] 40 CFR 131.10(g) identifies six factors that a state may use to justify removal of a designated use that is not an existing use. Although this section of the regulation is specific to use removal, it also generally supports adoption of site-specific water quality standards based on pollutant concentrations that are feasible to attain.

Price River with the state-wide criterion of 1,200 µg/L, which was sandwiched between two segments with site-specific TDS criteria of 1,700 mg/L and 3,000 mg/L.

To address the 2010 disapproval, the UDWQ proposes to move the segment boundary where the 3,000 mg/L criterion ends and the 1,700 mg/L site-specific criterion begins upstream from the confluence with Coal Creek to the confluence with Soldier Creek. This revision to the segment description would apply the more stringent 1,700 mg/L site-specific TDS criterion up to the confluence with Soldier Creek. The WQU has reviewed the information and data provided in the total maximum daily load (TMDL) and has determined that it is reasonable to apply of the 1,700 mg/L criterion to this section of the Price River. The 1,700 mg/L criterion is an attainability-based value that accounts for the load reductions that would occur if non-point source best management practices (BMP) are implemented in the watershed. It is our understanding that no water quality data specific to this reach of the Price River are available; therefore, the WQU believes it is reasonable to revise the segment description so that the more stringent site-specific criterion is applied to this section of the Price River. If the Board were to adopt the proposed revision to the segment description, the WQU would likely recommend approval; however, as new water quality data and information on the highest attainable water quality become available and BMPs are implemented in the watershed, UDWQ should reevaluate the site-specific standards adopted for this segment and other segments in the Price River watershed to determine if the standards should be revised (as required by 40 CFR § 131.20(a)).

Table 2-14-2 Numeric Criteria for Aquatic Wildlife

UDWQ proposes the following revisions Table 2.14.2:

- Deletion of the acute mercury criterion; and
- Addition of acute and chronic criteria for tributyltin, acrolein, and chloropyrifos.

The WQU supports the proposal to delete the existing acute mercury criterion of 2.4 µg/L, leaving only the chronic mercury criterion of 0.012 µg/L in place. The existing acute criterion is inconsistent with the existing CWA § 304(a) recommendation for mercury of 1.4 µg/L (1995 Updates; EPA-820-B-96-001). Furthermore, and more importantly, the acute criterion only accounts for aquatic life effects resulting from water column exposure. It does not reflect the importance of exposure via the food pathway and for that reason it is significantly underprotective and not a useful criterion.

The WQU commends the UDWQ for proposing to add the EPA recommended 304(a) criteria for tributyltin, acrolein, and chloropyrifos to Utah's numeric criteria for aquatic wildlife use protection.

Table 2-14-2 List of Human Health Criteria

UDWQ proposes to update the existing acrolein and phenol human health criteria to the following:

	Existing Criteria (µg/L)		**Proposed Criteria (µg/L)**	
Parameter	**Water & Organisms**	**Organisms Only**	**Water & Organisms**	**Organisms Only**
Acrolein	190	290	6	9
Phenol	21,000	1,700,000	10,000	860,000

The EPA recently published updates to its acrolein and phenol water quality criteria for protection of human health (74 Fed. Reg. 27535, 27536, June 10, 2009). The EPA revised the human health water

quality criteria based on the Agency's 2000 Human Health Methodology (EPA-822-B-00-004). This methodology incorporates significant scientific advances made in the last two decades, particularly in the areas of cancer and noncancer risk assessments, exposure assessments, and methodologies to estimate bioaccumulation in fish. The updated water quality criteria integrate new reference doses for acrolein and phenol that have been added to the Agency's Integrated Risk Information System. The proposed values are also consistent with EPA's current CWA Section 304(a) criteria recommendations. The WQU supports adoption of the updated criteria.

OTHER COMMENTS

- There appears to be a typo in R317-2-12.1.a, where Category 2 is changed to Category 3. Earlier drafts of the proposed revisions included a proposal to align the numbering of Utah's antidegradation Categories with the EPA's Tiers; however, this proposal did not make it into the final proposal that was noticed for public comment. It appears that one revision was not changed back to its original number.
- The UDWQ may want to consider using "tributyltin" instead of "tributyl tin" since it is more commonly spelled without the space.

CONCLUSION

We hope these comments are helpful to the UDWQ, the Board, and the parties to this rulemaking. We appreciate the efforts of the UDWQ and the parties to address issues of concern to the EPA. If there are questions concerning our comments, please contact me at (303) 312-6947, or Lareina Guenzel at (303) 312-6610.

Sincerely,

Sandra Spence, Acting Chief
Water Quality Unit

cc: Christopher Bittner

ENCLOSURE 1

SUMMARY OF SITE-SPECIFIC REVISIONS TO ANTIDEGRADATION CLASSIFICATIONS, USE DESIGNATIONS AND SEGMENT DESCRIPTIONS

Antidegradation Classification Revisions

Regulation	Drainage	Waterbody	Rule change and Rationale
R317-2-12.1.a. & R317-2-12.2.b	Weber River	Weber River, from Uintah to Mountain Green	Correct error in previous rulemaking where antidegradation category of this section of the Weber River was the unintentionally changed
R317-2-12.2.b.6	Weber River	Calk Creek and tributaries from ~~U.S. Highway 189~~ Main Street in Coalville to headwaters	Reassign the antidegradation category boundary for Chalk Creek to Main Street in Coalville because of highway name changes.
R317-2-12.2.b.6	Weber River	Weber River and tributaried from ~~U.S. Highway 189~~ Utah State Route 32 near Oakley to headwaters	Reassign the antidegradation category boundary for Weber River to Utah State Route 32 because of highway name changes
R317-2-12.2.b.12	Farmington Bay	Shepard Creek and tributaries from ~~Height~~ Haight Bench Canal diversion to headwaters (Davis County)	Correct typographical error
R317-2-12.2.b.12	Farmington Bay	Farmington Creek and tributaries from ~~Height~~ Haight Bench Canal diversion to headwaters (Davis County)	Correct typographical error

Use Designation and Segment Description Revisions - Rivers, Creeks and Streams

Regulation	Drainage	Waterbody	Rule change and Rationale
R317-2-13.1.a	Upper Colorado River	Fremont River and tributaries, through Capitol Reef National Park to headwaters	Upgrade designated use from 2B to 2A*
R317-2-13.1.b	Green River	Price River and tributaries, from Carbon Canal Diversion at Price City Golf Course to Price city Water ~~Water~~ Treatment Plant intake	Correct typographical error
R317-2-13.1.b	Green River	O-Wi-Yu-Kuts Creek and tributaries, Daggett County	Correct typographical error
R317-2-13.4.a	Weber River	Ogden River and tributaries, from confluence with Weber River to Pineview Dam, except as listed below	Upgrade designated use from 2B to 2A*

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Regulation	Drainage	Waterbody	Rule change and Rationale
R317-2-13.5.a	Utah Lake-Jordan River	Red Butte Creek and tributaries from Liberty Park pond inlet to Red Butte Reservoir	Assign beneficial uses (2B, 3A and 4) to a previously unclassified reach of Red Butte Creek
R317-2-13.5.a	Utah Lake-Jordan River	Emigration Creek and tributaries, from ~~Foothill Boulevard~~ 1100 East in Salt Lake City to headwaters	Extend lower segment boundary downstream to assign beneficial uses to a section of the creek not previously classified. Add beneficial use of Class 4*
R317-2-13.5.a	Utah Lake-Jordan River	Parley's Creek and tributaries, from 1300 East in Salt Lake City to Mountain Dell Reservoir ~~to headwaters~~	Delete "to headwaters" because they are included in another segment with the same use designations
R317-2-13.6.a	Sevier River	Sevier River and tributaries below U.S. National forest boundary from Gunnison Bend Reservoir to Annabella Diversion except ~~except~~ as listed below	Correct typographical error

Use Designation Revisions: Lakes and Reservoirs

Regulation	County	Waterbody	Rule change and Rationale*
R317-2-13.12.b	Box Elder	Willard Bay Reservoir	Delete 2B – Retain 2A
R317-2-13.12.c	Cache	Hyrum Reservoir	Delete 2B – Retain 2A Delete "**" since not site-specific temperature standard has been promulgated
R317-2-13.12.e	Daggett	Flaming Gorge Reservoir (Utah portion)	Delete 2B – Retain 2A
R317-2-13.12.g	Duchesne	Moon Lake	Delete 2B – Retain 2A
R317-2-13.12.g	Duchesne	Scout Lake	Delete 2B – Retain 2A
R317-2-13.12.g	Duchesne	Starvation Reservoir	Delete 2B – Retain 2A
R317-2-13.12.h	Emery	Huntington North Reservoir	Delete 2B – Retain 2A
R317-2-13.12.h	Emery	Joe's Valley Reservoir	Delete 2B – Retain 2A
R317-2-13.12.h	Emery	Millsite Reservoir	Delete 2B – Retain 2A
R317-2-13.12.k	Juab	Sevier Bridge (Yuba) Reservoir	Delete 2B – Retain 2A
R317-2-13.12.n	Morgan	East Canyon Reservoir	Delete 2B – Retain 2A
R317-2-13.12.p	Rich	Bear Lake (Utah portion)	Delete 2B – Retain 2A
R317-2-13.12.r	San Juan	Lake Powell (Utah portion)	Delete 2B – Retain 2A
R317-2-13.12.s	Sanpete	Palisade Reservoir	Delete 2B – Retain 2A
R317-2-13.12.u	Summit	Echo Reservoir	Delete 2B – Retain 2A
R317-2-13.12.u	Summit	Lyman Lake	Delete 2B – Retain 2A

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Regulation	County	Waterbody	Rule change and Rationale*
R317-2-13.12.u	Summit	Rockport Reservoir	Delete 2B – Retain 2A
R317-2-13.12.w	Uintah	Red Fleet Reservoir	Delete 2B – Retain 2A
R317-2-13.12.w	Uintah	Steinaker Reservoir	Delete 2B – Retain 2A
R317-2-13.12.x	Utah	Big East Lake	Assign beneficial uses (2B, 3A, 4) to a waterbody that was not previously classified
R317-2-13.12.y	Wasatch	Deer Creek Reservoir	Delete 2B – Retain 2A
R317-2-13.12.z	Washington	Sand Hollow Reservoir	Assign beneficial uses (1, 2A, 3B, 4) to a waterbody that was not previously classified

*Class 2A -- Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.
Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
Class 3A -- Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.