

# IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

## 58.01.02 - WATER QUALITY STANDARDS

### DOCKET NO. 58-0102-1101

#### NOTICE OF RULEMAKING - TEMPORARY AND PROPOSED RULE

**EFFECTIVE DATE:** The temporary rule is effective June 30, 2011.

**AUTHORITY:** In compliance with Sections 67-5221(1) and 67-5226(1), Idaho Code, notice is hereby given that the Board of Environmental Quality has adopted a temporary rule and the Department of Environmental Quality is commencing proposed rulemaking. This rulemaking action is authorized by Sections 39-105, 39-107, and 39-3601 et seq., Idaho Code.

**PUBLIC HEARING SCHEDULE:** No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before August 19, 2011. If no such written request is received, a public hearing will not be held.

**DESCRIPTIVE SUMMARY:** As NPDES permits are coming up for renewal, the U.S. Environmental Protection Agency (EPA) has begun including thermal effluent limits in reissued permits. The City of Boise NPDES permit renewal is expected to be released as a draft in the summer of 2011 and will be based on current water quality standards unless they are revised promptly. Without this rule change, thermal effluent limits in NPDES permits and costs to meet those limits will be greater than needed to protect aquatic life resources.

Two parts of Idaho's water quality standards are likely to drive inordinate thermal treatment costs:

1. Excessive limits on water temperature rise in Subsections 401.01.c. and d. (aka thermal treatment requirements); and
2. Outdated numeric criteria to protect salmonid spawning.

DEQ proposes to revise the Water Quality Standards, IDAPA 58.01.02, in two sections addressing temperature: 1) the thermal treatment requirements in Subsections 401.01.c. and d. which limit the rise in water temperature due to wastewater treatment plants, and 2) site-specific criteria for water temperature in Section 278 to protect salmonid spawning.

The origin of Idaho's thermal treatment requirements is unknown but is thought to be based on avoiding 'thermal shock' to fish and providing a level of protection that is largely redundant of and far in excess of that provided by ambient criteria. While 'thermal shock' can be an issue for fish, it is thought to occur when fish encounter abrupt temperature changes of 5-6°C or more, not 1-2°C. DEQ proposes to remove Subsections 401.01.c. and d. and rely on the retained language in Subsections 401.01.a. and b. to provide a more flexible means to address possible thermal shock on a case-by-case basis and to provide full protection from adverse effects of heated effluent in addition to protection provided to aquatic life by ambient temperature criteria in Section 250.

Idaho's current salmonid spawning criteria are based on recommendations from EPA made in the mid 1970s. EPA updated its recommendation regionally in 2003. While DEQ would like to adopt this recommendation statewide, questions about time periods in which the criterion would apply in various waterbodies across the state has lead DEQ at this time to scale back to a site-specific proposal. DEQ proposes to adopt EPA's recommended criterion of 13°C as a maximum seven-day average of daily maximums as a site-specific criterion to protect salmonid spawning and incubation in the three waterbodies within the Lower Boise watershed (HUC 17050114) currently designated for salmonid spawning. The proposal specifies the time period for which the criterion applies to each waterbody and the species which are protected.

Although the rule is not expected to lower the level of protection of aquatic life, particularly fish populations, all Idahoans that recreate in, fish from or otherwise enjoy the quality of Idaho's surface waters may be interested in commenting on this proposed rule. Those most affected include NPDES permitted dischargers and citizens that pay for municipal sewage treatment, especially residents of the Treasure Valley. The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality in November 2011 for adoption as a pending rule. The pending rule is expected to become final and effective upon adjournment of the 2012 legislative session if adopted by the Board and approved by the Legislature.

**TEMPORARY RULE JUSTIFICATION:** Pursuant to Section 67-5226(1)(c), Idaho Code, the Governor has found that temporary adoption of the rule is appropriate in that the rule confers a benefit. Adoption of a temporary rule would reduce thermal treatment costs for pending NPDES permit renewals.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: Not applicable.

**NEGOTIATED RULEMAKING:** The text of the proposed rule has been drafted based on discussions held and concerns raised during negotiations conducted pursuant to Section 67-5220, Idaho Code, and IDAPA 58.01.23.810-815. On May 4, 2011, the Notice of Negotiated Rulemaking was published in the [Idaho Administrative Bulletin, Vol. 11-5, pages 99 through 100](#), and a preliminary draft rule was made available for public review. A meeting was held on May 25, 2011. Several members of the public participated in this negotiated rulemaking process by attending the meeting and by submitting written comments. A record of the negotiated rule drafts, written comments received, and documents distributed during the negotiated rulemaking process is available at <http://www.deq.idaho.gov/58-0102-1101-temporary-proposed>.

**IDAHO CODE § 39-107D STATEMENT:** The standards included in this proposed rule are not broader in scope, nor more stringent, than federal regulations and do not regulate an activity not regulated by the federal government.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year when the pending rule will become effective: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS AND SUBMISSION OF WRITTEN COMMENTS:** For assistance on questions concerning the temporary and proposed rule, contact Don Essig at [don.essig@deq.idaho.gov](mailto:don.essig@deq.idaho.gov), (208)373-0119.

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before September 2, 2011.

DATED this 30th day of June, 2011.

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**THE FOLLOWING IS THE TEMPORARY RULE & PROPOSED TEXT FOR DOCKET NO. 58-0102-1101**

278. LOWER BOISE RIVER SUBBASIN, HUC 17050114 SUBSECTION ~~15~~40.12.

01. **Boise River, SW-1 and SW-5 -- Salmonid Spawning and Dissolved Oxygen.** The waters of the Boise River from Veterans State Park to its mouth will have dissolved oxygen concentrations of six (6) mg/l or seventy-five percent (75%) of saturation, whichever is greater, during the spawning period of salmonid fishes inhabiting those waters. (3-15-02)

02. **Indian Creek, SW-3b, Mason Creek, SW-6, and Sand Hollow Creek, SW-17 -- Modified Aquatic Life Use.** All numeric criteria applicable to the seasonal cold water aquatic life use apply with the exception of dissolved oxygen. Dissolved oxygen concentrations are to exceed four (4) mg/l at all times. (3-15-02)

03. **Fifteenmile Creek, SW-7; Tenmile Creek, SW-8, and Five Mile Creek, SW-10 -- Modified Aquatic Life Use.** All numeric criteria applicable to the seasonal cold water aquatic life use apply. (3-15-02)

04. **Boise River, SW-5 and SW-11a -- Copper and Lead Aquatic Life Criteria.** The water-effect ratio (WER) values used in the equations in Subsection 210.02 for calculating copper and lead CMC and CCC values shall be two and five hundred seventy-eight thousandths (2.578) for dissolved copper and two and forty-nine thousandths (2.049) for lead. These site-specific criteria shall apply to the Boise River from the Lander St. wastewater outfall to where the channels of the Boise River become fully mixed downstream of Eagle Island. (5-3-03)

05. **Indian Creek, SW-3a -- Site-Specific Criteria for Water Temperature.** A maximum weekly maximum temperature of thirteen degrees C (13°C) to protect brown trout and rainbow trout spawning and incubation applies from October 15 through June 30. (6-30-11)T

06. **Boise River, SW-5 and SW-11a -- Site-Specific Criteria for Water Temperature.** A maximum weekly maximum temperature of thirteen degrees C (13°C) to protect brown trout, mountain whitefish, and rainbow trout spawning and incubation applies from November 1 through May 30. (6-30-11)T

07. **Point Source Thermal Treatment Requirement.** With regard to the limitations set forth in Section 401 relating to point source wastewater discharges, only the limitations of Subsections 401.01.a. and 401.01.b. and the temperature limitation relating to natural background conditions shall apply to discharges to any water body within the Lower Boise River Subbasin. (6-30-11)T

**(BREAK IN CONTINUITY OF SECTIONS)**

**401. POINT SOURCE WASTEWATER TREATMENT REQUIREMENTS.**

Unless more stringent limitations are necessary to meet the applicable requirements of Sections 200 through 300, or unless specific exemptions are made pursuant to Subsection 080.02, wastewaters discharged into surface waters of the state must have the following characteristics: (4-11-06)

01. **Temperature.** The wastewater must not affect the receiving water outside the mixing zone so that: (7-1-93)
- a. The temperature of the receiving water or of downstream waters will interfere with designated beneficial uses. (7-1-93)
  - b. Daily and seasonal temperature cycles characteristic of the water body are not maintained. (7-1-93)
  - ~~c. If the water is designated for warm water aquatic life, the induced variation is more than plus two (+2) degrees C. (3-15-02)~~
  - ~~d. If the water is designated for cold water aquatic life, seasonal cold water aquatic life, or salmonid~~

~~spawning, the induced variation is more than plus one (+1) degree C.~~ (3-15-02)

~~ec.~~ If temperature criteria for the designated aquatic life use are exceeded in the receiving waters upstream of the discharge due to natural background conditions, then ~~Subsections 401.01.c. and 401.01.d. do not apply and instead~~ wastewater must not raise the receiving water temperatures by more than three tenths (0.3) degrees C. (4-11-06)(6-30-11)T

**02. Turbidity.** The wastewater must not increase the turbidity of the receiving water outside the mixing zone by: (7-1-93)

**a.** More than five (5) NTU (Nephelometric Turbidity Units) over background turbidity, when background turbidity is fifty (50) NTU or less; or (7-1-93)

**b.** More than ten percent (10%) increase in turbidity when background turbidity is more than fifty (50) NTU, not to exceed a maximum increase of twenty-five (25) NTU. (7-1-93)

**03. Total Chlorine Residual.** The wastewater must not affect the receiving water outside the mixing zone so that its total chlorine residual concentration exceeds eleven one-thousandths (0.011) mg/l. (1-1-89)