

**HOUSE BILL NO. 128**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - FIRST SESSION

**BY REPRESENTATIVE HUDSON**

**Introduced: 2/12/97**

**Referred: Resources, Finance**

**A BILL**

**FOR AN ACT ENTITLED**

**1 "An Act relating to water quality; directing the Department of Environmental  
2 Conservation to conduct water quality research; establishing the Water Science  
3 Oversight Board; and providing for an effective date."**

**4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

**5 \* Section 1. FINDINGS AND INTENT.** It is the legislature's intent that the policy of  
**6** the state be to protect the quality and uses of the state's water. The legislature finds that the  
**7** state's water resources have unique characteristics but that, in attempting to develop water  
**8** quality regulations, the Department of Environmental Conservation has often had to act  
**9** without specific data about the state's water. It is the legislature's view that one of the results  
**10** of this lack of data has been the growth of increasingly complex and conservative regulations.  
**11** In order to reconcile the sometimes conflicting demands of protecting water quality and  
**12** encouraging the economic use of the state's water, the legislature finds that it is important that  
**13** there be adequate data gathering, water quality testing, and other research that will enable the  
**14** department to establish valid standards and a workable system of water quality regulations

1 appropriate for this state. It is the intent of this Act to direct the department to conduct the  
 2 necessary research and adopt new regulations based on that research.

3 \* **Sec. 2.** AS 46.03 is amended by adding new sections to read:

4 **Sec. 46.03.082. Research plan relating to water quality.** (a) The  
 5 department shall work cooperatively with interested parties affected by its water quality  
 6 regulations to seek funds to perform research in order to determine appropriate water  
 7 quality standards for the state. Based on the availability of funding, the department  
 8 shall prepare research plans which may include research on

9 (1) appropriate aquatic life criteria for acute and chronic toxicity under  
 10 conditions in this state and on species found in this state;

11 (2) toxicity testing procedures, including procedures for testing toxicity  
 12 of whole effluent, that are ecologically relevant to conditions and species found in this  
 13 state; and

14 (3) the relative costs and benefits of toxicity testing required or  
 15 proposed to be required under the state's water quality standards or proposed  
 16 standards.

17 (b) The department shall submit the plans developed under (a) of this section  
 18 to the Water Science Oversight Board for its consideration and recommendations.

19 (c) After receiving the board's recommendations under (b) of this section, the  
 20 department shall consider modifying the plans and then, subject to the availability of  
 21 funds for the purposes of this section, carry out the activities described in the plans.  
 22 The department may contract with the University of Alaska and other appropriate  
 23 entities and individuals to perform activities under the plans.

24 **Sec. 46.03.083. Water quality standards; interim standards.** (a) The  
 25 department shall submit the results of the research carried out under AS 46.03.082 to  
 26 the Water Science Oversight Board. After receiving the board's recommendations  
 27 under AS 46.03.085(c) and considering them, the department shall propose water  
 28 quality regulations and, after appropriate public process and revisions, as necessary,  
 29 adopt the regulations. The regulations proposed and adopted under this subsection  
 30 shall be part of one process so that they all have the same effective date.

31 (b) Until the effective date of the regulations that are adopted under (a) of this

1 section, the water quality regulations of the department must include

2 (1) provisions for allowing mixing zones as prescribed under (c) of this  
3 section;

4 (2) a level of allowable arsenic that is set at 50 micrograms per liter  
5 of water for the protection of human health;

6 (3) limits for total dissolved solids for freshwater aquaculture that are  
7 no more restrictive of increases above background levels than as described in the chart  
8 on page 258 of the 1986 edition of "Quality Criteria for Water," issued by the United  
9 States Environmental Protection Agency;

10 (4) provisions that require the department, when establishing site  
11 specific criteria based on natural conditions, to base those criteria on the natural  
12 conditions at the point of discharge; in determining the natural conditions at the point  
13 of discharge, the department shall consider the testimony of local residents, the best  
14 professional judgment of scientific experts, and other subjective evidence that may be  
15 available to supplement the quantitative data considered; the department shall consider  
16 uses to be fully protected by site specific criteria based on natural conditions if the site  
17 specific criteria protect those uses to the same extent as the uses would be protected  
18 by the natural conditions;

19 (5) procedures for reclassification of state water that implement the  
20 requirements of (d) of this section; and

21 (6) a limitation specifying that whole effluent toxicity testing is  
22 required only to the extent that the testing will support the research being carried out  
23 under AS 46.03.082; whole effluent toxicity testing may not be used by the department  
24 for the purpose of determining the compliance of a discharger with applicable permits,  
25 regulations, or laws.

26 (c) Provisions for mixing zones under regulations adopted under (b) of this  
27 section

28 (1) must allow a mixing zone, within which the applicable water quality  
29 standards may be exceeded, unless available evidence reasonably demonstrates that the  
30 pollutants discharged would

31 (A) bioaccumulate, bioconcentrate, or persist in the

1 environment; cause carcinogenic, mutagenic, or teratogenic effects on human  
2 health; or otherwise present a significant human health hazard;

3 (B) have a toxic effect in the water column, sediments, or biota  
4 outside the boundaries of the mixing zone;

5 (C) have an adverse effect on anadromous fish spawning or  
6 rearing or form a barrier to migratory species; or

7 (D) have an environmental effect so adverse that a mixing zone  
8 is not appropriate;

9 (2) must require a mixing zone to be as small as practicable and consist  
10 of two volumes, one that is immediately surrounding the initial discharge entry point  
11 and one that is outside that initial volume; at and beyond the boundaries of the smaller  
12 of the two volumes, acute aquatic life criteria shall apply; the size of the volume in  
13 which acute criteria apply must be set so as to prevent lethality to passing organisms;  
14 unless otherwise specified by the department, the method for calculating the boundaries  
15 of the volume in which acute criteria apply must follow procedures under alternatives  
16 2 or 3 in section 5.1.2 of the United States Environmental Protection Agency's Water  
17 Quality Standards Handbook, second edition, September 1993; at and beyond the outer  
18 limits of the mixing zone, human health and chronic aquatic life criteria shall apply;

19 (3) may be authorized by the department only if available evidence  
20 reasonably demonstrates that an effluent or substance that will exceed the water quality  
21 criteria set in regulations will be treated to remove, reduce, and disperse pollutants that  
22 contribute to the exceedance by using the most effective practicable methods  
23 considered by the department to be consistent with statutory and regulatory treatment  
24 requirements; in this paragraph, "available evidence," "practicable," and "reasonably  
25 demonstrates" have the meanings given in AS 46.03.084.

26 (d) Reclassification of state water under regulations adopted under (b) of this  
27 section must implement the following requirements:

28 (1) if a defined use class includes more than one listed use and not all  
29 listed uses are present within a specific body of water, the department shall, upon  
30 application, develop for the specific body of water a subclass of the defined use class  
31 that lists only the uses present in the body of water, and regulatory limits based on

1 uses not present in the specific body of water or included in the subclass may not be  
2 applied within the subclass;

3 (2) a classification defined for use for growth and propagation of fish,  
4 shellfish, and other aquatic life and wildlife may be applied only to water that supports  
5 biological communities that are balanced, integrated, adaptive communities of  
6 organisms having species and class composition, diversity, and functional organization  
7 comparable to that of natural habitat of the region;

8 (3) the department shall develop a use classification for naturally  
9 impaired aquatic systems where the growth and propagation of fish, shellfish, and other  
10 aquatic life and wildlife exists but is naturally impaired; for this use classification, the  
11 department shall use natural background conditions instead of aquatic life criteria.

12 **Sec. 46.03.084. Definitions.** In regulations of the department that relate to  
13 water pollution, water quality, and similar matters,

14 (1) "available evidence" means data or information that an applicant has  
15 or can obtain that is useful, relevant, and applicable to the applicant's application and  
16 relevant and applicable data and information that is readily available to the department  
17 from other sources but not data and information the collection or preparation of which  
18 is not practicable;

19 (2) "practicable" means available and capable of being done after taking  
20 into consideration cost, existing technology, and logistics in light of overall project  
21 purposes;

22 (3) "reasonably demonstrates," with respect to evidence that an event  
23 will take place or that a condition will be met, means that the evidence demonstrates  
24 to the satisfaction of the department, which shall evaluate the evidence and exercise  
25 the discretion afforded by law, that there is reasonable assurance that the event will  
26 take place or that the condition will be met.

27 **Sec. 46.03.085. Water Science Oversight Board.** (a) There is established  
28 in the department the Water Science Oversight Board. It is composed of the  
29 commissioner or the commissioner's designee and four additional members, each of  
30 whom has academic credentials and Alaska-based expertise in the field of water quality  
31 that are sufficient to enable oversight of the research performed under the plans

1 prepared under AS 46.03.082. One member shall be appointed by the chancellor of  
 2 the University of Alaska. Three members shall be appointed by the governor; one of  
 3 these three members shall be chosen from a list of three candidates proposed by the  
 4 president of the senate and one from a list of three candidates proposed by the speaker  
 5 of the house.

6 (b) A member of the board who is not a public employee is entitled to  
 7 compensation at a rate of \$400 for each day the member is engaged in the actual  
 8 performance of duties as a member of the board. The board may provide by rule for  
 9 compensation for partial days during which a member who is not a public employee  
 10 is engaged in actual performance of duties as a member of the board. A member of  
 11 the board who is not a public employee is also entitled to per diem and travel expenses  
 12 authorized for state boards and commissions under AS 39.20.180.

13 (c) The board shall

14 (1) review and comment on the plans prepared by the department under  
 15 AS 46.03.082;

16 (2) meet at least once every three months to review the work of the  
 17 department and its contractors that is carried out under the plans and to provide advice  
 18 to the department and its contractors concerning that work;

19 (3) report annually to the governor and to the house and senate  
 20 resources committees concerning the department's progress under the plans and making  
 21 recommendations for actions considered by the board to be necessary to improve or  
 22 facilitate the department's progress under the plans or to modify the plans;

23 (4) after reviewing the research results submitted to it under  
 24 AS 46.03.083(a), submit to the department the board's recommendations for changes  
 25 to the department's water quality standards or regulations;

26 (5) review the regulations proposed by the department under  
 27 AS 46.03.083(a);

28 (6) make a final report to the governor and to the house and senate  
 29 resources committees when the board has completed its review of the department's  
 30 research results and proposed regulations; and

31 (7) from time to time, as considered necessary by the board, advise the

1 department and the legislature concerning appropriate water quality standards and  
2 regulations for the state.

3 (d) In this section,

4 (1) "board" means the Water Science Oversight Board established under  
5 this section;

6 (2) "plans" means the plans prepared by the department under  
7 AS 46.03.082.

8 \* **Sec. 3. TIMELINES FOR ACTIONS.** (a) The department shall submit to the Water  
9 Science Oversight Board at least one of the plans required by AS 46.03.082(a), enacted by  
10 sec. 2 of this Act, by October 1, 1997.

11 (b) The department shall adopt regulations to implement AS 46.03.083(b), enacted by  
12 sec. 2 of this Act, by December 31, 1997.

13 (c) The department shall submit its research results to the Water Science Oversight  
14 Board, as required by AS 46.03.083(a), enacted by sec. 2 of this Act, by June 30, 2002.

15 \* **Sec. 4.** AS 46.03.082, 46.03.083, and 46.03.085, enacted by sec. 2 of this Act, are  
16 repealed on the effective date of the regulations adopted to implement AS 46.03.083(a). The  
17 commissioner of environmental conservation shall notify the revisor of statutes of the effective  
18 date of the regulations.

19 \* **Sec. 5.** This Act takes effect July 1, 1997.