State of Alaska

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER



18 AAC 70

Water Quality Standards

Proposed Amendments Public Notice Version May 31, 2017

Register	,	2017	ENVIRON	MENTAL CO	NSERVAT	ION
18 AAC 70.0	015(a)(2)(D) is repea	aled:				
	(D) repealed	_//	_·			
(Eff. 11/1/97	7, Register 143; am	4/8/2012, R	Register 202;	am//	_, Register_)
Authority:	AS 46.03.010 AS 46.03.020 AS 46.03.050	AS 46	.03.080 .03.710 .03.100	AS 46.03.1 AS 46.03.7		
	AS 46.03.070					

18 AAC 70 is amended by adding a new section to read:

18 AAC 70.016. Antidegradation implementation methods for discharges authorized under the Clean Water Act. (a) General requirements. 18 AAC 70.015 applies to all State water including all waters of the United States in Alaska. 18 AAC 70.015(a)(1) through (3) identifies three combinations or "tiers" of water quality and water quality protection. In implementing the policy under 18 AAC 70.015 for a water of the United States within the State of Alaska, the following provisions apply

- (1) an antidegradation analysis and findings are required for discharges subject to authorization by the department under
 - (A) the Alaska Pollutant Discharge Elimination System (APDES)

 Program under 18 AAC 83; and
 - (B) 33 U.S.C. 1341 (Clean Water Act section 401) water quality certifications; for 33 U.S.C. 1341 (Clean Water Act section 401) water quality certifications of 33 U.S.C 1344 (Clean Water Act section 404) permits, the department, in its discretion, will determine upon review, whether the evaluation and findings of no significant degradation per 33 U.S.C. 1344 and 40 C.F.R. 230, as amended through

July 1, 2012, are sufficient to comply with state antidegradation requirements for Tiers 1 and 2 under this section with regard to water quality impacts to receiving water immediately surrounding the dredge or fill material; the antidegradation findings will consider where the fill would be placed and impacts to the receiving water from the fill activity; only temporary and limited degradation may be authorized in Tier 3 water, in accordance with (d)(4)(A) of this section.

- (2) an antidegradation analysis and findings are not required of the department for
- (A) activities proposed for the express purpose of watershed protection or restoration where the applicant supplies information and the department finds the antidegradation analysis is not required because the lowering of water quality would be temporary and limited and is necessary to secure long-term water quality improvement, including projects for the protection or attainment of existing and designated uses in water where the department determines those uses have been impaired or threatened due to the loss or diminishment of the water's natural characteristics; projects under this paragraph shall implement all department required practicable best management practices;
- (B) emergency response actions under the direction of a federal or state on-scene coordinator, designated under 33 U.S.C. 1321, AS 46.04.020, or AS 46.09.020, provided that any lowering of water quality is temporary and limited and existing uses are maintained and protected; any lowering of water quality that is not temporary and limited would need to be addressed by the responsible party whose actions, or lack thereof, necessitated emergency action; existing laws and regulations, such as 40 C.F.R. 300

Register ______, _____2017 ENVIRONMENTAL CONSERVATION

(National Oil and Hazardous Substances Pollution Contingency Plan) or 33 U.S.C. 2701-2762 (Oil Pollution Act of 1990) may be used to address restoration, rehabilitation, replacement, or acquisition of the equivalent for the affected natural resources, including long term water quality impacts;

- (C) Federal Clean Water Act Section 401 certifications where the department has waived certification; this provision does not alter federal agencies' existing obligations to issue permits in compliance with state water quality standards, including antidegradation provisions per 40 C.F.R. 230.10(b)(1);
- (D) revisions to 18 AAC 70, including revisions to the water use classes and subclasses, revisions to water quality criteria, adoption of site specific criteria, and the reclassification of waters.
- (3) an antidegradation analysis is tier specific as described under (b), (c) and (d) of this section; antidegradation analyses and department findings for Tier 1 and Tier 2 protection levels are on a parameter by parameter basis; analysis and department findings for Tier 3 water are on a designated water or segment thereof basis.
- (4) an antidegradation analysis is subject to the public participation and intergovernmental review procedures under 18 AAC 70.015(c).
- (5) the applicant shall submit sufficient information, measured or modeled, to complete an antidegradation analysis under (b), (c), and (d) of this section on department approved forms; the department, in its discretion, shall review and determine whether the information is sufficient; information required for department review shall include

- (A) identification of the receiving water, including the geographic extent potentially affected by the proposed discharge;
 - (B) description of project purpose;
 - (C) type of facility, activity, and discharge;
 - (D) discharge rate;
- (E) parameters of concern in the discharge and the respective concentrations, persistence, and potential impacts to the receiving water;
- (F) data on parameters that may alter the effects of the discharge to the receiving water;
 - (G) which tier should apply for each parameter of concern; and
 - (H) any additional information as requested by the department.
- (6) if determined necessary by the department the following baseline water quality provisions apply
 - (A) the applicant shall submit sufficient and credible baseline water quality information, measured or modeled, for the receiving water in order for the department to determine the applicable tier protection level or the assimilative capacity of the receiving water that could include accommodation of future development activities or multiple discharges;
 - (B) the level of baseline water quality data necessary for department review will be relative to the size of the project, characteristics of the proposed discharge, and the characteristics of the receiving water including special management or habitat designations, as applicable; and

Register ,	2017	ENVIRONMENTAL	CONSERVATION

- (C) when evaluating whether the information submitted is sufficient and credible or whether additional information may be required, the department will consider all relevant factors, including
 - (i) sensitivity of the receiving water to degradation of existing or designated uses;
 - (ii) types of parameters of concern in the proposed discharge;
 - (iii) available dilution or assimilative capacity of the receiving water for the proposed discharge, including the impacts of authorized discharges, whether existing or not;
 - (iv) representativeness of any surrogate water information proposed for baseline water quality relative to the receiving water under review, including geographic, hydrologic, geologic, water use and water quality characteristics;
 - (v) validity of any assumed baseline concentrations of below detection levels;
 - (vi) the quantity, date of analysis, analytical method, detection level, spatial and temporal scope of any submitted data; and
 - (vii) whether the data considers applicable seasonal or natural variability.
- (b) Tier 1 analysis of existing use protection. Tier 1 applies to all water of the United States within the State of Alaska and affords the protection under 18 AAC 70.015(a)(1). The following applies for Tier 1 antidegradation analysis

- (1) the department will conduct a Tier 1 antidegradation analysis for all discharges specified in (a)(1) of this section;
- (2) the finding of no significant degradation under 33 U.S.C. 1344 (Clean Water Act Section 404(b)(1)) and 40 C.F.R. 230 guidelines, as amended through July 1, 2012, fulfills Tier 1 antidegradation finding requirements for dredge or fill material;
- (3) the applicant shall submit sufficient information required under (a)(5) of this section in support of the application;
- (4) Tier 1 is the only antidegradation protection level for a parameter where the water quality does not exceed the applicable criteria for that parameter as demonstrated by the fact that:
 - (A) the receiving water is listed as impaired under 33 U.S.C. 1313 (Clean Water Act section 303(d)) for that parameter;
 - (B) the department determines a Tier 1 protection level for that parameter based on information in the most recent state report issued under 33 U.S.C. 1315 (Clean Water Act section 305(b));
 - (C) the department has previously issued a Tier 1 finding for that parameter in the water; in making a Tier 1 finding for a parameter in the water, the department may use information submitted by the applicant under (a)(6) of this section; the water remains Tier 1 for the applicable parameter unless sufficient and credible information is provided for the department to review and determine that the protection level for the parameter should be revised; and
 - (D) the receiving water is not a designated Tier 3 water.

Register,2017	7 ENVIRONMENTAL CO	ONSERVATION
---------------	--------------------	-------------

- (5) the department will not authorize a discharge unless, in its discretion, it finds that
 - (A) existing uses and the water quality necessary for protection have been identified based on available evidence, including water quality and use related data, information submitted by the applicant, and water quality and use related data and information received during public comment;
 - (B) existing uses will be maintained and protected; and
 - (C) the discharge will not cause water quality to be lowered further where the department finds that the parameter already equals or does not exceed applicable criteria in 18 AAC 70.020(b), 18 AAC 70.030 or 18 AAC 70.236(b).
- (c) Tier 2 analysis for the lowering or potential lowering of high quality water. Tier 2 applies when the water quality for a parameter in a water of the United States within the State of Alaska exceeds the applicable criteria under 18 AAC 70.020(b), 18 AAC 70.030 or 18 AAC 70.236(b) and affords the protection under 18 AAC 70.015(a)(2). The following applies for Tier 2 antidegradation analysis
- (1) Tier 2 is presumed for all water as the default protection level for all parameters unless
 - (A) the water is listed as impaired under 33 U.S.C. 1313 (Clean Water Act section 303(d)) for the applicable parameter;
 - (B) the department determines a Tier 1 protection level for the applicable parameter based on information in the most recent state report issued under 33 U.S.C. 1315 (Clean Water Act section 305(b));

- (C) available evidence is provided for department review and approval to determine if a parameter is only subject to Tier 1 analysis and the department finds
 - (i) the applicable parameter level is persistently equal to or does not exceed water quality criteria in 18 AAC 70.020(b), 18 AAC 70.030 or 18 AAC 70.236(b); and
 - (ii) the failure to have water quality that exceeds applicable criteriais not the result of permit violations for discharges to the receiving water,unlawful discharges from non-point sources, or spills; or
 - (D) the water is designated Tier 3.
- (2) the department will conduct a Tier 2 antidegradation analysis for discharges specified in (a)(1) of this section that will lower water quality or have the potential to lower the water quality of Tier 2 high quality water, when reviewing
 - (A) a general or individual permit for a proposed new or expanded discharge; for proposed expanded discharges under a reissued general or individual permit, a Tier 2 analysis will only be conducted for the portion of the discharge that represents an increase from the existing, authorized discharge;
 - (B) a general or individual permit for an existing discharge that did not previously require authorization and is proposing an expanded discharge;
 - (C) a general or individual permit for an existing discharge where a permit was previously required but has not been issued;
 - (D) a general or individual permit for a previously expired permit that had not been administratively extended; or

Register,2017 ENVIRONMENTAL CONSERVATION
(E) a general or individual permit for a previously terminated discharge
seeking reauthorization.
(3) a Tier 2 antidegradation analysis and department findings are not required
when
(A) reissuing a general or individual permit for a discharge that is not
proposing to expand;
(B) issuing a general or individual permit for an existing discharge that
did not previously require authorization and is not proposing to expand; or
(C) reissuing an administratively continued permit that is not proposing as
expanded discharge.
(4) the applicant shall submit sufficient information in support of the application;
the amount of information and level of detail necessary is relative to the size of the project or
facility, the characteristics of the proposed discharge, and the characteristics of and potential risk
to the receiving water; information required for department review includes
(A) information required under (a)(5) of this section;
(B) a description and analysis of a range of practicable alternatives that

have the potential to prevent or lessen the degradation associated with the proposed

(C) identification of receiving water quality and accompanying

environmental impacts on the receiving water for each of the practicable alternatives in

discharge;

(4)(B);

- (D) evaluation of the cost for each of the practicable alternatives in (4)(B) relative to the degree of water quality degradation;
- (E) identification of the proposed practicable alternative which prevents or lessens water quality degradation while also considering accompanying cross media environmental impacts; if the applicant has selected a non-degrading alternative, a social or economic importance analysis is not required; and
- (F) an analysis, that supports the accommodation of important social or economic development in the area where the receiving water is located, for the proposed discharge that will lower or has the potential to lower water quality.
- (5) to demonstrate accommodation of important social or economic development, the applicant shall either complete
 - (A) a social importance analysis identifying each affected community in the area where the receiving water for the proposed discharge is located and demonstrating that a lowering of water quality accommodates important social development under 18 AAC 70.015(a)(2)(A) including in one or more of the following areas
 - (i) community services provided;
 - (ii) public health or safety improvements;
 - (iii) infrastructure improvements;
 - (iv) education and training;
 - (v) cultural amenities; or
 - (vi) recreational opportunities; or

Register ______, ______2017 ENVIRONMENTAL CONSERVATION

(B) an economic importance analysis identifying each affected community in the area where the receiving water for the proposed discharge is located and demonstrating that a lowering of water quality accommodates important economic development under 18 AAC 70.015(a)(2)(A) including in one or more of the following areas

- (i) employment, job availability and salary impacts;
- (ii) tax base impacts;
- (iii) expanded leases and royalties;
- (iv) commercial activities;
- (v) access to resources; or
- (vi) access to a transportation network.
- (6) the department reserves the right to require the analysis of specific alternatives or request additional information the department determines necessary to assess the submitted alternatives analysis, social importance analysis or economic importance analysis.
- (7) the department will review available evidence; if the department finds that the proposed discharge will lower water quality in the receiving water, the department, in its discretion, will not authorize a discharge unless it finds that
 - (A) the reduction of water quality meets the applicable criteria of 18 AAC 70.020(b), 18 AAC 70.030 and 18 AAC 70.236(b), unless allowed under 18 AAC 70.200, 18 AAC 70.210 or 18 AAC 70.240;
 - (B) all Tier 1 findings under (b)(5) of this section are met;

- (C) point source and state regulated nonpoint source discharges to the receiving water will meet requirements under 18 AAC 70.015(a)(2)(E); to make this finding the department will
 - (i) identify point sources and state regulated nonpoint sources that discharge to, or otherwise impact, the receiving water;
 - (ii) consider whether there are outstanding noncompliance issues with point source permits or department required nonpoint source best management practices, consider whether receiving water quality has improved or degraded over time, and take actions that will achieve the requirements of 18 AAC 70.015(a)(2)(E); and
 - (iii) coordinate with other state or federal agencies as necessary.
- (D) the alternatives analysis provided under (4)(B), (C), (D) and (E) of this subsection demonstrates that
 - (i) a lowering of water quality under 18 AAC 70.015(a)(2)(A) is necessary; when one or more practicable alternatives that would prevent or lessen the degradation associated with the proposed discharge are identified, one such alternative shall be selected for implementation; and
 - (ii) the methods of pollution prevention, control, and treatment applied to all waste and other substances to be discharged are found by the department to be the most effective and practicable.
- (E) the social or economic importance analysis provided under 4(F) of this subsection as further defined by (5)(A) or (B) of this subsection demonstrates that a

Register,	2017	ENVIRONMENTAL CONSERVATION
lowering of water quality	accommo	odates important social or economic development
under 18 AAC 70.015(a)	(2)(A); and	d

- (F) 18 AAC 70.015 and this section have been applied consistent with 33 U.S.C. 1326 (Clean Water Act section 316) with regard to potential thermal discharge impairments.
- (d) Tier 3 analysis for the protection of water quality in Outstanding National Resource Water. Tier 3 applies to a designated water or segment thereof and upon designation affords the protection under 18 AAC 70.015(a)(3). The following applies for Tier 3 antidegradation analysis
- (1) the department will conduct a Tier 3 antidegradation analysis for all discharges specified in (a)(1) of this section to a Tier 3 or tributary to a Tier 3 water that will degrade or have the potential to degrade the existing water quality of a Tier 3 water when reviewing
 - (A) all proposed new or expanded discharges;
 - (B) existing discharges that did not previously require authorization and are proposing to expand;
 - (C) existing discharges where a permit was previously required but had not been issued;
 - (D) discharges with previously expired permits that had not been administratively extended; and
 - (E) previously terminated discharges seeking reauthorization.
- (2) the applicant shall submit sufficient information in support of the application; information required for department review shall include

- (A) applicable baseline water quality information as required under (a)(6) of this section for the Tier 3 water where the proposed discharge is to a Tier 3 water, and for the Tier 3 water and the receiving water where the proposed discharge is to a water tributary to the Tier 3 water and will degrade or potentially degrade the existing quality of a Tier 3 water;
 - (B) applicant information as required under (a)(5) of this section;
- (C) information on the quality of the existing or proposed expanded discharge to the Tier 3 water; and
- (D) information on the effect of the proposed new or expanded discharge to the water quality of the Tier 3 water.
- (3) a new zone of deposit under 18 AAC 70.210 or a new mixing zone under 18 AAC 70.240 is prohibited in a designated Tier 3 water;
- (4) the department will not authorize a discharge to a Tier 3 water or tributary to a Tier 3 water unless, in its discretion, it finds that
 - (A) the lowering of water quality is temporary and limited, including any lowering of water quality due to dredging or fill placement authorized under a 33 U.S.C 1344 (Clean Water Act section 404) permit;
 - (B) no lowering of the Tier 3 water quality will occur such that the existing uses and Tier 3 water quality will be maintained and protected;
 - (C) discharges to a tributary to a Tier 3 water meet all applicable requirements under (b) and (c) of this section;

Register, 2017 ENV	VIRONMENTAL CONSERVATION
--------------------	--------------------------

- (D) existing nonpoint sources to the Tier 3 water are using all department required practicable best management practices; the department will consider available information that documents whether nonpoint sources to the Tier 3 water are using best management practices to ensure that no lowering of water quality will occur and uses will be maintained and protected; and
- (E) a new zone of deposit under 18 AAC 70.210 or new mixing zone under 18 AAC 70.240 is not proposed in a Tier 3 water.
- (e) General permit antidegradation analysis. The department will apply the antidegradation policy and implementation methods for all new or reissued APDES general permits at the time a general permit is issued. At the time a general permit is issued, the department
- (1) will obtain available evidence, as necessary, to support tier specific requirements and findings under this section;
- (2) will make findings on how the antidegradation policy under 18 AAC 70.015 and the antidegradation implementation requirements under this section are met; and
- (3) will reserve the right to request information from applicants who may discharge under the general permit in order to conduct the antidegradation analysis.

(E11/, Kegistei	(Eff.	//	, Register)
-----------------	-------	----	------------	---

Authority:	AS 46.03.010	AS 46.03.070	AS 46.03.110
	AS 46.03.020	AS 46.03.080	AS 46.03.710
	AS 46.03.050	AS 46.03.100	AS 46.03.720

18 AAC 70.990 is amended by adding new definitions to read:

- (73) "assimilative capacity" means the increment of water quality that is better than the applicable criteria; or the capacity of a specific water to accommodate the addition of a parameter without causing violations of applicable water quality criteria, impairing water quality, or negatively impacting uses.
 - (74) "highest statutory and regulatory requirements" means
 - (A) any federal technology-based effluent limitation identified in 40 C.F.R. 125.3 and 40 C.F.R. 122.29, as amended through July 1, 2012, adopted by reference;
 - (B) any minimum treatment standards identified in 18 AAC 72.050;
 - (C) any treatment requirement imposed under another state law that is more stringent than a requirement of this chapter; and
 - (D) any water quality-based effluent limitations established in accordance with 33 U.S.C. 1311 (Clean Water Act section 301(b)(1)(C)).
- (75) "new or expanded" means discharges that are regulated for the first time or discharges that are expanded such that they could result in an increase in permitted parameter load or concentration or other changes in discharge characteristics that could lower water quality or have other adverse environmental impacts.
- (76) "parameter" means any chemical, physical or biological characteristic of water, including pollutant as defined under 18 AAC 83.990(49).

Register, 2017 EN'	VIRONMENTAL CONSERVATION
--------------------	--------------------------

- (77) "receiving water" means the water, or segment thereof, to which a discharge occurs or is proposed to occur.
- (78) "sufficient and credible" means data that is of adequate quantity and quality; scientifically valid chemical, physical or biological data collected under a sampling and analysis plan, including quality assurance and quality control procedures, and addressing spatial and temporal coverage, as applicable;
- (79) "temporary and limited" means that degradation is limited to the shortest possible time, generally weeks or months, and is limited in impact. Such activities shall not permanently degrade water quality and shall only be allowed after all practicable means of minimizing such degradation are implemented. The following factors will be considered in determining if proposed degradation would be temporary and limited:
 - (A) length of time during which water quality will be lowered; this may include temporary activities that require more than one construction season to complete;
 - (B) percent change in ambient conditions;
 - (C) parameters and characteristics, including the potential for cumulative effects;
 - (D) likelihood for long term water quality benefits to the water body after the short term degradation;
 - (E) degree to which achieving the applicable water quality standards or criteria during the proposed activity will be at risk; and

Register		_ 2017	ENVIRONM	ENTAL CONSERVATION
	(F) potentia	l for any	residual long t	erm effects on existing uses. (Eff.
11/1/97, Reg	ister 143; am 4/29/99,	Registe	r 150; am 6/22/	2003, Register 166; am 6/13/2006,
Register 178;	; am/, Regi	ister)	1	
Authority:	AS 46.03.010	AS 40	5.03.080	AS 46.03.110
	AS 46.03.020	[AS 4	6.03.090]	AS 46.03.710
	AS 46.03.050	AS 40	5.03.100	AS 46.03.720
	AS 46.03.070			