Department of Environmental Conservation Division of Environmental Health

Drinking Water Regulations Amendments 18 AAC 80

Public Notice Period May 15 – June 15, 2018

Final Responsiveness Summary July 10, 2018

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I. Introduction

A. Summary of Project

The proposed regulations amendments deals with regulations of the Department of Environmental Conservation (DEC or Department) regarding Drinking Water. This project is comprised of changes that have been requested by the Drinking Water program for several years, including substantial re-writes of sections to make the resulting regulations clearer and more easily understandable by the program staff and the public. Other nonsubstantive changes and edits are desired to correct manifest errors and to update terminology.

The proposed amendments included correction of typos, correction of grammatical errors, corrections to citations of statutory authority, updated cross references, and updated terminology throughout the chapter. The amendments also include clarifications and restatements of existing sections throughout the chapter to make the resulting sections more clear, readable, and understandable. Other minor, but substantive, changes are also made throughout the chapter. Conforming changes to regulations regarding definitions in chapters dealing with underground storage tanks and seafood processing and inspection were also proposed.

B. Opportunities for Public Participation

A public notice on the proposed regulatory changes was issued on May 15, 2018. This public notice, with a closing date of June 15, 2018, established a public comment period of at least 30 days for the proposed changes to the regulations.

The public notice was posted to the *Alaska Online Public Notice System* on May 11, 2018.

On May 15, 2018, the Department published a legal notice in the *Anchorage Daily News*, a newspaper with statewide distribution.

On May 12, 2018, the Department sent approximately 1,200 postcards to the administrative contacts of all active public water systems on record with DEC; to organizations and individuals involved in the drinking water industry; and to other people who have requested to be on the list to receive these notifications of proposed regulations changes for Drinking Water regulations (18 AAC 80). In addition, on May 14, the Department sent approximately 60 packets containing a "Dear Interested Person" letter and a copy of the Public Notice with Additional Regulations Notice Information to the people who have requested to be on the list to receive these notifications of proposed regulations changes.

The proposed regulations notice was also distributed by electronic mail to legislators and other state of Alaska employees. In addition to direct mailings, two websites posted the notice online and provided downloadable files of the proposed draft regulations: The DEC Regulations webpage, and the Drinking Water Program's Regulations Changes webpage. This public comment period ended June 15, 2018. Written comments were received from three sources.

C. Regulations Background

The Department initially proposed the following changes to the Drinking Water regulations at 18 AAC 80:

General changes:

- Correction of typos, correction of grammatical errors, updated cross references, and updated terminology throughout the chapter.
- Corrections to citations of statutory authority throughout the chapter.
- Clarifications and re-statements of existing sections throughout the chapter to make the resulting sections more clear, readable, and understandable.
- Conforming edits throughout the chapter.
- Conforming edits in 18 AAC 34 (seafood processing and inspection) and 18 AAC 78 (underground storage tanks).

Specific changes:

- 18 AAC 34.1990(a) adds and amends several definitions.
- 18 AAC 78.025(d) amends the distance allowable between an underground storage tank and a private drinking water system.
- 18 AAC 80.005(b) expands the list of who the chapter applies to.
- 18 AAC 80.010(a)(5)(A) adopts additional federal definitions by reference.
- 18 AAC 80.010(a)(6)(B) adopts additional scope for turbidity sampling and analytical requirements.
- 18 AAC 80.010(a) adopts federal requirements for maximum contaminant levels for turbidity.
- 18 AAC 80.010(b)(6) adopts Supplement 2 to the Fifth Edition of the Manual for the Certification of Laboratories Analyzing Drinking Water.
- 18 AAC 80.010(b)(8) repeals an out of date publication.
- 18 AAC 80.010(b)(18) adopts a new method for the determination of turbidity for systems that avoid filtration.
- 18 AAC 80.010(d) repeals the list of suggested reference publications. A current list will be maintained on the Department's website.
- 18 AAC 80.015(b)(5) allows the Department discretion in requiring impervious surface around a well.
- 18 AAC 80.015(d) clarifies requirements for persons who own or are responsible for a well, hole, or excavation into a water supply source or potential water supply source for a public water system.
- 18 AAC 80.015(e) clarifies requirements for a person who decommissions a well. Sets out new requirement for well log submission after decommissioning.
- 18 AAC 80.030(b)(2) amends the list of certifying organizations for materials that may be in contact with drinking water in a public water system.

- 18 AAC 80.030(b)(3) rewrites paragraph to describe additional situations for which the Department may approve a material which is not NSF/ANSI certified.
- 18 AAC 80.055(a) removes emergency preparedness requirements for certain nontransient non-community water systems and deletes requirement for biennial updates of emergency response plan for community water systems.
- 18 AAC 80.055(b) eliminates emergency priority measures plan requirements for certain non-transient non-community water systems and transient non-community water systems. Eliminates requirement for biennial updates for community water systems.
- 18 AAC 80.055(h) repeals biennial renewal of certification of compliance requirement.
- 18 AAC 80.057 adds a new section outlining requirements for notifying the Department of an emergency.
- 18 AAC 80.205(b)(5) expands the scope of what must be included in plans with regards to overall treatment schemes for public water systems, including additional provisions for automated systems.
- 18 AAC 80.205(c)(1) clarifies the requirement for engineering evaluation of water quality data for public water systems proposing a change in the water treatment process.
- 18 AAC 80.205(c)(2) clarifies raw water testing requirements for public water systems proposing to use a new source.
- 18 AAC 80.210 increases the deadline to provide well log information to the Department and amends the specific well log information that must be submitted.
- 18 AAC 80.220 amends section to clarify the scope of vehicles that haul water as part of a public water system. Allows the Department to conduct onsite vehicle inspections in lieu of engineering plan review.
- 18 AAC 80.300(b)(3) adds treatment technique requirements for turbidity compliance.
- 18 AAC 80.303 adds a new section to accommodate certain contaminants that have a treatment technique requirement or action level requirement for compliance.
- 18 AAC 80.310(f) removes the lead and copper testing requirements for rainwater catchment systems.
- 18 AAC 80.340(a) changes the timeframe to report results of water analyses to the Department.
- 18 AAC 80.340(b) changes the timeframe to report results of water analyses to the Department.
- 18 ÅAC 80.340(d) amends subsection to include all water systems using treatment.
- 18 AAC 80.340(d)(1) adds a new analytical method for measuring turbidity.
- 18 AAC 80.340(d)(2)(D) deletes the methods for measuring residual disinfectant concentration for iodine, since it is no longer an approved disinfectant.
- 18 AAC 80.355(b) expands the scope of subsection to include E. coli and all results of total coliform repeat sample analysis to reporting requirements.
- 18 AAC 80.420(b) expands scope of subsection to include E. coli and requires a laboratory to report both positive and negative results.
- 18 AAC 80.430(h)(5) extends deadline for notifying the Department from 5 to 30 days after final completion of all corrective actions under a corrective action plan.
- 18 AAC 80.605 makes specific the types of information that the Department will consider when making a determination of whether a water source is a Groundwater

Under the Direct Influence of Surface Water (GWUDISW) source; changes the qualifications for persons authorized to complete on-site field assessments; adds requirements in regards to water quality assessments that the Department may require when making a GWUDISW determination; and clarifies when the Department will determine that a water sources is a GWUDISW.

- 18 AAC 80.1100(b)(3) specifies the timeframe for proficiency testing submittals for laboratory certification.
- 18 AAC 80.1100(i) adds a new subsection outlining and clarifying the administrative appeal process for laboratory certification.

D. Purpose of Responsiveness Summary

The purpose of this document is to summarize and respond to the comments received during the public comment period.

II. Public Comments

A. Questions Posed by the Public

No written questions were posed by the public in accordance with HB 140 (Regulation Impact Transparency Act).

B. General Comment Regarding the Complexity of Regulations

Comment Summary

One person submitted a comment indicating that increased standards are unnecessary and are more costly to implement.

Response

The Drinking Water Program agrees that drinking water regulations in general have increased in complexity over the years. However, the Drinking Water Program does not agree that the standards are unnecessary or that the cost to implement them will increase. These changes are based on the ever-increasing knowledge of contaminants and their presence in water systems and in the environment. The increase in regulatory requirements for federally regulated water systems is aimed at reducing the risk to public health. The purpose of the proposed amendments, at least in part, is to make the requirements easier for operators to understand and in some cases, to reduce the burden on operators. For example, the proposed regulations eliminate emergency priority measures plan requirements for certain non-transient non-community water systems and transient non-community water systems and also eliminate the requirement for biennial updates for community water systems.

An economic analysis of the proposed regulations conducted by the Department did not anticipate any increased cost burden on the regulated public. Therefore, the Drinking Water Program does not believe that implementation of the proposed regulations will increase costs on the regulated public.

C. Comments on Proposed 18 AAC 80.057

Comment Summary

Two comments were received regarding this section. The commenters requested that the Department clarify the circumstances in which emergency notification should be required. The commenters suggested that the situations that could be considered an emergency under the proposed language are ambiguous, and/or would require reporting of circumstances that may not have any impact on human health or that violate MCLs. One of the commenters also suggested that emergencies be reported to the Department not later than 24 hours from when the operator becomes aware of the issue, not from when the emergency occurs, which may not be immediately known.

Response

Only emergency situations required notification to the Department within 24 hours in the proposed regulations. The term "emergency" is defined in proposed 18 AAC 80.1990(a)(54) as "...an unforeseen event that causes damage to or disrupts normal operations of a public water system and requires immediate action to protect public health and safety". Thus, an unforeseen event that does not cause damage or disrupt normal operations, and that does not require immediate action to protect public health and safety is not an "emergency" situation requiring 24 hour notice to the Department. The additional examples in the proposed 18 AAC 80.057(1) - (4) are not stand-alone definitions, but only served to further clarify the types of emergencies that require Department notification. Therefore, situations that are not emergencies, even if they could be categorized as situations described in (1) - (4), do not require Department notification under this section.

It should be noted that non-emergency changes may be subject to 18 AAC 80.200(b) which requires that installation, alteration, renovation, operation, or improvement of a public water system, or any part of one, requires prior written approval from the Department of engineering plans that comply with 18 AAC 80.205.

The Department agrees that emergency situations may not be detected immediately after they begin, and will amend the language in this section to indicate that the Department must be notified not later than 24 hours from when the operator becomes aware of the emergency situation, not from when the emergency occurs.

D. Comments on Proposed 18 AAC 80.200(c)

Comment Summary

One comment was received regarding this subsection. The commenter is concerned that all emergency repairs made to a public water system will be subject to the notification requirements of 18 AAC 80.057. The commenter suggests that numerous emergency repairs

are made in response to system leaks and do not require a full system shutdown. Thus, positive pressure is maintained, which prevents contamination. The commenter requests that the Department consider adding language that exempts emergency repairs where positive pressure is maintained and for other repairs that do not threaten public health.

Response

The term "emergency" is defined in proposed 18 AAC 80.1990(a)(54) as "...an unforeseen event that causes damage to or disrupts normal operations of a public water system and requires immediate action to protect public health and safety". The additional examples (1) - (4) provided in the proposed 18 AAC 80.057 are not meant to be stand-alone definitions, but only to further clarify the types of emergencies that require Department notification. For the commenter's example, since a leak repair that maintains positive pressure does not disrupt normal operations of the system, nor does it require immediate action to protect public health and safety, it would not be an emergency repair subject to this subsection or 18 AAC 80.057. Thus, an unforeseen event that does not cause damage or disrupt normal operations, and that does not require immediate action to protect public health and safety is not an "emergency" situation requiring 24 notice to the Department.

It should be noted that non-emergency changes may be subject to 18 AAC 80.200(b), which requires that installation, alteration, renovation, operation, or improvement of a public water system, or any part of one, requires prior written approval from the Department of engineering plans that comply with 18 AAC 80.205.

E. Comments on Proposed 18 AAC 80.205(b)(5)

Comment Summary

One comment was received regarding this paragraph. The commenter states that the Department's engineering staff are not qualified to provide meaningful review of automation systems and simple automated processes are often misunderstood. Because the safe operation of some water treatment systems requires use of automated processes to ensure adequate protection of public health and safety, the commenter suggests that the regulation should be re-written to require a 3rd party review by a qualified engineer of the applicable automation systems. The engineer's report could then be submitted along with the engineering design information to the Department for review.

Response

While the Department is not opposed to having automation systems reviewed by a qualified 3rd party engineer at the water system owner's expense, the scope of the proposed amendments are intended to be "housekeeping" and to avoid adding new financial burdens on public water systems. Mandating a 3rd party review by a qualified engineer that would impose an additional cost burden on the water system owner is outside of the scope of these regulatory amendments.

The automation and instrumentation review by the Department is not a new requirement and is currently covered under 18 AAC 80.205(b)(9), which requires submittal of "other information that the Department determines is necessary to assess compliance with this chapter". Information on automation is necessary to determine if the water system has adequate controls to operate and complies with standard engineering principles and practices. Because the existing regulations do not explicitly address this requirement, information about automation systems isn't always provided by the water system owner in a timely manner. Therefore, the Department often has to make additional requests for information that delay the review and cost the owner time and money. The proposed change is intended to make the requirement clearer, resulting in a more efficient review process.

While some public water systems are staffed with qualified engineers that can operate the water system as well as build and fix automation and control systems, having a qualified engineer on staff is rare in Alaska. Often, owners and operators don't know what to ask for and end up with water systems they are not able operate and maintain, which is why the Department includes this as part of their plan review requirements.

F. Comments on Proposed 18 AAC 80.605

Comment Summary

One comment was received regarding this section. The commenter made several observations including that the proposed rewrite of this section does not streamline the GWUDISW determination process; requires multiple judgement calls by the Department; does not provide guidance for how Department staff will determine if groundwater is "directly" influenced by surface water; and does not change the need for multiple back and forth communications between the engineer and the Department during the determination process.

In addition, the commenter made several suggestions to improve the GWUDISW determination process including the development of a decision tree designed to take into account well construction information; water quality data comparisons with surface water; a time of travel calculation based on proposed pumping rates and aquifer type; and a third party review process when the decision tree indicates that the source is not groundwater.

The commenter expressed his view that the current GWUDISW determination process is inefficient and unnecessarily excruciating and he is opposed to the proposed revisions.

Response

The Department appreciates the comments and suggestions provided regarding inefficiencies in the current GWUDISW determination process and concerns that the proposed reorganization of the regulations will not improve the process. The proposed reorganization is not intended to significantly change the current process. Rather the reorganization is intended to clarify the information needed to make the determination; the criteria under which a water source will be classified as a GWUDISW; and the flow of the review and determination process.

The Department believes providing clarity on the information required to make the GWUDISW determination will result in less time and resources devoted to unnecessary studies, or studies that are done without input or guidance from the Department. This will help ensure that additional sampling and testing are done only when necessary, and are conducted in a manner that results in useable data with sufficient accuracy, timing, and frequency to be meaningful to the evaluation.

GWUDISW determinations are made based on several risk factors. The Department has developed a draft screening process that evaluates the risk criteria identified in the regulations in more detail. For the water sources that do not clearly indicate these risk factors but indicate some risk and require a more complicated evaluation, the Department has a team of qualified staff that are able to support the reviewing engineer in the final determination.

While most GWUDISW determinations are relatively simple and primarily consist of reviewing information provided by the water system's engineer, the Department agrees that in more complex situations, the determination process can be less straightforward. The suggestions for changes to the GWUDISW process are well received by the Department, however, they are outside of the scope of this "housekeeping" regulatory package.

The Department does not intend that the proposed changes reflect the final revisions to the GWUDISW regulations. Nor does it intend that the regulations should be the only resource developed to assist system engineers with developing new water sources. Much of the guidance that would help with the GWUDISW determination process would be better provided in a guidance document or manual with the space to discuss details of the studies, tests, and methods used to make the determinations, rather than in regulations. A stakeholder workgroup comprised of well construction engineers, geologists, hydrologists, etc., may be best suited to develop applicable guidance documents. If such a group is formed, the Department will make all interested stakeholders aware and solicit their participation.

G. Comments on Proposed 18 AAC 80.1990(a)(126)

Comment Summary

One comment was received regarding this paragraph. The commenter states that the proposed definition of "routine maintenance" may be misinterpreted to be narrower than intended, and that the term "but not limited to" should be added for clarification.

Response

Using the phrase "including, but not limited to" is discouraged in the Alaska Regulations Drafting Manual, 2015. The term "including" when used in this chapter always refers to a non-limited set of examples unless noted otherwise.

H. Comments Outside of the Scope of the Proposed Regulations

Comment Summary

One comment was received regarding a topic outside of the scope of the proposed regulations. The commenter suggested that the Department develop a water and wastewater design advisory board comprised of qualified engineers and operators specializing in water, wastewater, and instrumentation. This board would be utilized during review of complex projects and serve as an appeals adjudicator.

Response

The Department thanks the commenter for the suggestion. The Department's Division of Water provides support to the Governor's Water & Wastewater Works Advisory Board, which is comprised of certified operators, public works personnel, and engineers. The Board advises the Department on issues related to operator certification and training. While this Board does not directly address the matters raised in the commenter's suggestion, the Department thought that the commenter may find it instructive to understand the scope of the Board's work.