



STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL**

OFFICE OF THE  
SECRETARY

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

PHONE: (302) 739-9000  
FAX: (302) 739-6242

**Secretary's Order No.: 2017-WS-0020**

**RE: Approving Final Regulations to Amend 7 DE Admin. Code 7401:  
*Surface Water Quality Standards***

**Date of Issuance: August 14, 2017**

**Effective Date of the Amendment: September 11, 2017**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") pursuant to 7 *Del.C.* §§6006 and 6010, and the following findings of fact based on the record, reasons and conclusions are entered as an Order of the Secretary in the above-referenced regulatory proceeding.

**Background, Procedural History and Findings of Fact**

This Order relates to proposed regulation amendments ("Amendments") to 7 DE Admin. Code 7401, *Surface Water Quality Standards*. The Clean Water Act of 1972 ("CWA") set in place a federal program intended to restore the chemical, physical, and biological integrity of national waters. To reach these goals, a series of steps were mandated by Congress for the U.S. Environmental Protection Agency ("EPA") and the individual States to take. The first step was for the States to set their own standards for their waters. As established under the CWA, water quality standards are the regulations which list designated uses, water quality criteria, and an anti-degradation policy for each

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State. Such standards have been established to protect public health and welfare, and to further enhance water quality in the State. While the standards are State regulations, they must be approved by the EPA. If the EPA cannot approve the water quality standards as proposed by the State, then EPA is mandated to take over the process and set standards on that State's behalf.

The CWA was amended in 2000 by the *Beaches Environmental Assessment and Coastal Health* ("BEACH") Act. Pursuant to the BEACH Act, States are required to update their water quality criteria to meet updated guidance from the EPA, pursuant to the marine recreational bacteria standards found in EPA's *2012 Recreational Water Quality Criteria*, which reflect the latest scientific knowledge, public comments, and external peer review. Said criteria are designed to protect the public from exposure to harmful levels of pathogens while participating in water-contact activities such as swimming, wading, and surfing in all waters designated for such recreational uses.

The Amendments to the CWA by the BEACH Act directed the EPA to conduct studies associated with pathogens and human health, and to publish new or revised criteria recommendations for pathogens and pathogen indicators based on those studies. The purpose of this proposed regulatory promulgation is to adopt as final the aforementioned *revised* proposed amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, in order to provide the Department with a criteria basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State of Delaware, and to comply with the CWA, as amended by the BEACH Act, as set forth in 33 U.S.C. §1313(i)(1)(B) and 40 CFR §131.21.

It should be noted that the proposed adopted criteria would apply to enterococcus bacteria determined by the Department to be of non-wildlife origin, based on best scientific judgment using available information. Furthermore, the Department notes that swimming in waters affected by runoff during runoff periods may present an elevated risk of gastrointestinal illness, and is not recommended.

The Department's Division of Watershed Stewardship commenced the regulatory development process with Start Action Notice ("SAN") #2016-15 (approved by then-DNREC Secretary David S. Small on December 13, 2016). The Department published its initial proposed regulation Amendments in the January 1, 2017 *Delaware Register of Regulations*. The Department then held a public hearing on February 23, 2017. Consistent with 29 *Del.C.* §10118(a), the public hearing record remained open for public comment through March 10, 2017.

While no members of the public attended the February 23, 2017 hearing, comment was received from EPA by the Department on the actual day of said hearing. At that time, EPA recommended several revisions to the Department's proposed Amendments, namely, for the purposes of clarification, and to ensure that the proposed criteria for coastal recreation waters was consistent with EPA's recommended *2012 Recreational Water Quality Criteria*. As noted above, the hearing record initially closed for comment in this matter on March 10, 2017, with no additional comment (other than that from EPA) having been received by the Department regarding this matter.

Upon closure of the hearing record as noted above, a thorough review of EPA's recommendations was performed by the Department's Division of Watershed Stewardship. The Department concurred with EPA's suggested changes, and thus *revisions* to the initial proposed Amendments were made at that time. In addition to the above revisions resulting from EPA's comments, the Department also noticed several clerical errors that were contained in the initial proposed Amendments. Thus, revisions were made to correct those errors as well.

Due to the fact that the above revisions were made by the Department subsequent to the public hearing, and that the revisions were substantive in nature, the *revised* proposed Amendments were re-noticed and re-published in the *Delaware Register of Regulations* on May 1, 2017. Accordingly, the hearing record was re-opened for additional public comment for an additional forty-five (45) days, so as to provide complete transparency to the public with regard to this rule-making process. This additional comment period remained open through Thursday, June 15, 2017.

Once again, EPA provided comment on the *revised* proposed Amendments in its letter dated May 18, 2017. In that letter, EPA advised that it was pleased to see that DNREC had incorporated the suggested criteria changes as identified in its previous letter of February 22, 2017, and stated that no further comments would be forthcoming from EPA with regard to this matter. No other comment was received from the Department prior to the hearing record formally closing on June 15, 2017.

Subsequent to the hearing record closing on June 15, 2017, the Division of Watershed Stewardship provided the Department's presiding Hearing Officer, Lisa A. Vest, with a formal Technical Response Memorandum ("TRM"), dated July 21, 2017.

This TRM provided a balanced discussion of the comment received, and provided the Department's reasoning for all action taken with regard to these *revised* proposed Amendments. As noted above, all revisions to the proposed Amendments were made *prior to* the re-publication and re-opening of the hearing record for comment from May 1, 2017 – June 15, 2017. Although comment was received by the Department during the second aforementioned comment period, no additional revisions were made to these *revised* proposed Amendments as a result of the same. Therefore, no further re-publication or re-noticing is necessary in this matter.

Hearing Officer Vest prepared a Hearing Officer's Report dated July 28, 2017 ("Report"). The Report documents the proper completion of the required regulatory amendment process, establishes the record, and recommends the adoption of the *revised* proposed Amendments as attached to the Report as Appendix "A".

### **Reasons and Conclusions**

Based on the record developed by the Department's experts and established by the Hearing Officer's Report, I find that the *revised* proposed regulatory amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, are well-supported. Therefore, the recommendations of the Hearing Officer are hereby adopted, and I direct that the *revised* proposed regulatory Amendments be promulgated as final.

I find that the Department's experts in the Division of Watershed Stewardship fully developed the record to support adoption of these *revised* regulatory Amendments. The adoption of these *revised* regulatory Amendments will enable the Department to formally update Delaware's water quality criteria to meet updated federal EPA guidance for bacterial water quality. Furthermore, adoption of these *revised* proposed

Amendments will provide the Department with a criteria basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State of Delaware, and to comply with the CWA, as amended by the BEACH Act, as set forth in 33 U.S.C. §1313(i)(1)(B) and 40 CFR §131.21

In conclusion, the following reasons and conclusions are entered:

1. The Department has the statutory basis and legal authority to act with regard to the *revised* proposed amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, pursuant to 7 *Del.C.*, Ch. 60;

2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.*, Ch. 60, to issue an Order adopting these *revised* proposed regulatory amendments as final;

3. The Department provided adequate public notice of the initial proposed regulatory amendments, and all proceedings associated with the same, in a manner required by the law and regulations, provided the public with an adequate opportunity to comment on the proposed regulatory amendments, including at the time of the public hearing held on February 23, 2017, and initially held the record open through close of business on March 10, 2017, consistent with 29 *Del.C.* §10118(a), in order to consider public comment on the same before making any final decision;

4. To ensure that all of the aforementioned revisions to the initial proposed Amendments were fully vetted to the public, a re-noticing and re-publication of the *revised* proposed Amendments was issued by the *Delaware Register of Regulations* on May 1, 2017. Accordingly, the Department re-opened the hearing record from May 1, 2017, through close of business June 15, 2017, in order to properly vet the *revised*

proposed Amendments to the public, and to consider any public comment which might be offered on same before making any final decision in this proposed promulgation;

5. While the Department has made revisions to the initial proposed regulatory Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, such changes were all fully vetted to the public as referenced above. Moreover, although additional comment was received by the Department during the second public comment period of May 1, 2017 – June 15, 2017, no additional changes were made to these *revised* proposed Amendments as a result of the same. Therefore, no additional re-publication or re-noticing is necessitated at this time;

6. The Department’s Hearing Officer’s Report, including its established record and the recommended *revised* proposed regulatory Amendments as set forth in Appendix “A”, are hereby adopted to provide additional reasons and findings for this Order;

7. The adoption of the *revised* proposed regulatory Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, will enable the Department to formally update Delaware’s water quality criteria to meet updated federal EPA guidance for bacterial water quality. Furthermore, adoption of these *revised* proposed Amendments will provide the Department with a criteria basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State of Delaware, and to comply with the CWA, as amended by the BEACH Act, as set forth in 33 U.S.C. §1313(i)(1)(B) and 40 CFR §131.21. Lastly, the adoption of said Amendments will assist the Department in further

enhancement of the water quality throughout the State, and in the continued protection of the public health and welfare of the citizens of Delaware;

8. The Department has reviewed these *revised* proposed regulatory Amendments in the light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* Ch.104, and has selected Exemption “B” regarding same, as this proposed regulation is not substantially likely to impose additional costs or burdens upon individuals and/or small businesses;

9. The Department’s *revised* proposed regulatory Amendments, as re-published in the May 1, 2017 *Delaware Register of Regulations*, and as set forth in Appendix “A” as noted above, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they are approved as final regulatory amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*; and

10. The Department shall submit this Order approving as final the *revised* proposed Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.



Shawn M. Garvin  
Secretary

## HEARING OFFICER'S REPORT

**TO:** The Honorable Shawn M. Garvin  
Cabinet Secretary, Department of Natural Resources and Environmental Control

**FROM:** Lisa A. Vest   
Public Hearing Officer, Office of the Secretary  
Department of Natural Resources and Environmental Control

**RE:** Proposed Regulation Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*

**DATE:** July 28, 2017

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### **I. BACKGROUND AND PROCEDURAL HISTORY:**

A public hearing was held on Thursday, February 23, 2017, at 6:00 p.m. at the Department of Natural Resources and Environmental Control (“DNREC”, “Department”), 89 Kings Highway, Dover, Delaware to receive comment on proposed regulatory amendments (“Amendments”) to 7 DE Admin. Code 7401, *Surface Water Quality Standards*. The Clean Water Act of 1972 (“CWA”) set in place a federal program intended to restore the chemical, physical, and biological integrity of national waters. To reach these goals, a series of steps were mandated by Congress for the EPA and the individual States to take. The first step was for the States to set their own standards for their waters.

As established under the CWA, water quality standards are the regulations which list designated uses, water quality criteria, and an anti-degradation policy for each State. Such standards have been established to protect public health and welfare, and to further enhance water quality in the State. While the standards are State regulations, they must be approved by the EPA. If the EPA cannot approve the water quality standards as proposed by the State, then EPA is mandated to take over the process and set standards on that State’s behalf.

The CWA was amended in 2000 by the *Beaches Environmental Assessment and Coastal Health* (“BEACH”) Act. Pursuant to the BEACH Act, States are required to update their water quality criteria to meet updated guidance from the EPA, pursuant to the marine recreational bacteria standards found in EPA’s *2012 Recreational Water Quality Criteria*, which reflect the latest scientific knowledge, public comments, and external peer review. Said criteria are designed to protect the public from exposure to harmful levels of pathogens while participating in water-contact activities such as swimming, wading, and surfing in all waters designated for such recreational uses.

The Amendments to the CWA by the BEACH Act directed the EPA to conduct studies associated with pathogens and human health, and to publish new or revised criteria recommendations for pathogens and pathogen indicators based on those studies. The purpose of this proposed regulatory promulgation is to adopt as final the aforementioned *revised* proposed amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, in order to provide the Department with a criteria basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State of Delaware, and to comply with the CWA, as amended by the BEACH Act, as set forth in 33 U.S.C. §1313(i)(1)(B) and 40 CFR §131.21. It should be noted that the proposed adopted criteria would apply to enterococcus bacteria determined by the Department to be of non-wildlife origin, based on best scientific judgment using available information. Furthermore, the Department notes that swimming in waters affected by runoff during runoff periods may present an elevated risk of gastrointestinal illness, and is not recommended.

The Department has the statutory basis and legal authority to act with regard to this proposed regulatory promulgation, pursuant to 7 *Del.C.*, Chapter 60. The aforementioned proposed Amendments were presented and thoroughly vetted by the Department at the public hearing on February 23, 2017. No members of the public attended that public hearing. Written comment was, however, received by the Department from the EPA on two separate occasions in this matter, and the same will be discussed in detail below. It should also be noted that all proper notification and noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

## **II. SUMMARY OF THE PUBLIC HEARING RECORD:**

The public hearing record consists of the following documents: (1) a verbatim transcript; (2) seven documents introduced by responsible Department staff at the public hearing held on February 23, 2017, and marked by this Hearing Officer accordingly as “Department Exhibits 1-7”; (3) E-mail dated February 23, 2017 from Mark A. Barath, B.A., MS, Environmental Scientist (EPA), which enclosed letter (dated February 22, 2017) from Evelyn S. MacKnight, Associate Director, Office of Standards, Assessment and TMDL, Water Protection Division, U.S. EPA, Region III; (4) *revised* proposed Amendments, as republished in the May 1, 2017 edition of the *Delaware Register of Regulations*; and (5) Technical Response Memorandum (“TRM”) dated July 21, 2017 from the Department’s Division of Watershed Stewardship. The Department’s person primarily responsible for the drafting and overall promulgation of these proposed Amendments, David Wolanski, Environmental Scientist, Division of Watershed Stewardship, developed the record with the relevant documents in the Department’s files.

As noted previously, the aforementioned proposed Amendments were presented and thoroughly vetted by the Department at the public hearing on February 23, 2017. While no members of the public attended that hearing, comment was received (via email) from EPA by the Department on the actual day of said hearing. In the letter dated February 22, 2017 from Associate Director MacKnight (previously identified above as Exhibit “3”), EPA recommended several revisions to the Department’s proposed Amendments, namely, for the purposes of clarification, and to ensure that the proposed criteria for coastal recreation waters was consistent with EPA’s recommended *2012 Recreational Water Quality Criteria*. Pursuant to Delaware law, the record remained open for fifteen (15) additional days subsequent to the date of the public hearing for the purpose of receiving additional public comment regarding this proposed promulgation. The hearing record initially closed for comment in this matter on March 10, 2017, with no additional comment (other than that from EPA) having been received by the Department regarding this matter.

Upon closure of the hearing record as noted above, a thorough review of EPA’s recommendations as set forth in its aforementioned letter was performed by the Department. The Division of Watershed Stewardship concurred with EPA’s suggested changes, and thus the following *revisions* to the proposed Amendments were made:

1. With regard to the updates to the existing table found in Section 4.5.7.1, a separate column entitled “*Statistical Threshold Value*” was added to provide additional criteria clarity; specifically, that the statistical threshold value of sample collected over a 30 day period shall not exceed 130 in more than 10 percent of the samples collected.

2. The use of the term “*weekly*” was struck from the proposed Amendments when referencing sampling frequency. EPA recommended that setting a weekly frequency threshold as component of the criteria may not be appropriate, since samples may be taken more frequently at some location, whether routinely or as a result of compliance follow-up. In its TRM, the Department noted that EPA’s updated criteria guidance values for coastal beaches are based on geometric means of 5 or more samples collected in 30 days, with the key words being “or more”. The Department agreed that states typically collect such data in monitoring programs based on sampling frequencies of one or more samples per week at coastal beaches that are also guarded for public safety at high use sites. DNREC further agreed that, as always, more data is better than less, and expects to use five or more samples collected in 30 days for any regulatory decisions for coastal beach waters.
3. Lastly, EPA voiced concern that, as initially drafted, the proposed Amendments appeared to apply to Atlantic Ocean Waters only, and that Delaware Bay Beaches would not be covered by the same. EPA noted that, in order to fully comply with the CWA, as amended by the BEACH Act, these criteria must apply to *all* coastal recreational waters, and thus revisions should be made to ensure the revised criteria apply to all Delaware Bay Beaches. Accordingly, the *revised* proposed Amendments have replaced the initial description of the applicable waters from “Atlantic Ocean Waters from Cape Henlopen to Delaware/Maryland State Line” to “*Marine Coastal Recreational Waters from the Delaware Bay to the Maryland State Line*”.

In addition to the above revisions resulting from EPA's comments, the Department also noticed several clerical errors that were contained in the initial proposed Amendments. Thus, revisions were made to correct those errors as well.

Due to the fact that the above revisions were made by the Department subsequent to the public hearing, the proposed *revised* Amendments were re-noticed and re-published in the *Delaware Register of Regulations* on May 1, 2017. Accordingly, the hearing record was reopened for additional public comment for an additional forty-five (45) days, so as to provide complete transparency to the public with regard to this rule-making process.

Once again, EPA provided comment on the *revised* proposed Amendments in their letter to this Hearing Officer dated May 18, 2017. In that letter, EPA advised that it was pleased to see that DNREC had incorporated the suggested criteria changes as identified in its previous letter of February 22, 2017, and stated that no further comments would be forthcoming from EPA with regard to this matter. No other comment was received from the Department prior to the hearing record formally closing on June 15, 2017. It should be noted that all revisions to the proposed Amendments were made *prior to* the re-publication and re-opening of the hearing record for comment from May 1, 2017 – June 15, 2017. Although comment was received by the Department during the second aforementioned comment period, no additional revisions were made to these proposed *revised* Amendments as a result of the same. Therefore, no further re-publication or re-noticing of the *revised* proposed Amendments is necessary.

For the Secretary's review, a copy of the Department's proposed *revised* Amendments as published in the May 1, 2017 *Delaware Register of Regulations* is attached hereto as Appendix "A"; and a copy of the aforementioned Technical Response Memorandum dated July 21, 2017 as provided by the Department's Division of Watershed Stewardship is attached hereto as

Appendix “B”. Again, all proper notification and noticing requirements concerning this proposed promulgation were met by the Department in this matter.

### III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Based on the record developed, I find and conclude that the Department has provided appropriate reasoning regarding the need for the proposed *revised* Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*. Accordingly, I recommend promulgation of the same in the customary manner provided by law.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to the proposed *revised* amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, pursuant to 7 *Del.C.*, Ch. 60;

2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.*, Ch. 60, to issue an Order adopting these proposed *revised* regulatory amendments as final;

3. The Department provided adequate public notice of the proposed regulatory amendments, and all proceedings associated with the same, in a manner required by the law and regulations, provided the public with an adequate opportunity to comment on the proposed regulatory amendments, including at the time of the public hearing held on February 23, 2017, and initially held the record open through close of business on March 10, 2017, consistent with 29 *Del.C.* §10118(a), in order to consider public comment on the same before making any final decision;

4. To ensure that all of the aforementioned revisions to the initial proposed Amendments were fully vetted to the public, a re-noticing and re-publication of the *revised* proposed Amendments was issued by the *Delaware Register of Regulations* on May 1, 2017. Accordingly, the Department re-opened the hearing record from May 1, 2017, through close of business June 15, 2017, in order to properly vet the *revised* proposed Amendments to the public, and to consider any public comment which might be offered on same before making any final decision in this proposed promulgation;

5. While the Department has made revisions to the initial proposed regulatory Amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards* as set forth above, such changes were all fully vetted to the public as referenced above. Moreover, although additional comment was received by the Department during the second public comment period of May 1, 2017 – June 15, 2017, no additional changes were made to these *revised* proposed Amendments as a result of the same. Therefore, no additional re-publication or re-noticing is necessitated at this time;

6. Promulgation of the proposed *revised* regulatory amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, will enable the Department to formally update Delaware's water quality criteria to meet updated federal EPA guidance for bacterial water quality. Furthermore, adoption of these proposed *revised* Amendments will provide the Department with a criteria basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State of Delaware, and to comply with the CWA, as amended by the BEACH Act, as set forth in 33 U.S.C. §1313(i)(1)(B) and 40 CFR §131.21. Lastly, the adoption of said Amendments will assist the Department in

further enhancement of the water quality throughout the State, and in the continued protection of the public health and welfare of the citizens of Delaware;

7. The Department has reviewed these *revised* proposed regulatory amendments in the light of the Regulatory Flexibility Act, consistent with 29 *Del.C.* Ch. 104 (version applicable to all regulations initially published on or after January 1, 2016), and has selected Exemption “B” regarding same, as this proposed regulation is not substantially likely to impose additional costs or burdens upon individuals and/or small businesses;

8. The Department’s *revised* proposed regulatory amendments, as published in the May 1, 2017 *Delaware Register of Regulations*, and as set forth in Appendix “A” hereto, are adequately supported, are not arbitrary or capricious, and are consistent with the applicable laws and regulations. Consequently, they should be approved as final regulatory amendments, which shall go into effect ten days after their publication in the next available issue of the *Delaware Register of Regulations*; and

9. The Department shall submit the *revised* proposed regulatory amendments as final regulatory amendments to 7 DE Admin. Code 7401, *Surface Water Quality Standards*, to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

  
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LISA A. VEST  
Public Hearing Officer

\\ahear\ SWQS Reg. Amendments.2017

Attachments/Appendix:

Appendix A: Proposed *revised* Reg. Amendments  
Appendix B: WS TRM (07/21/17)



**APPENDIX "A"**





(2) Due to the size of the proposed regulation, it is not being published here. A copy of the regulation is available at:

7102 Regulations Governing Underground Injection Control

**DIVISION OF WATERSHED STEWARDSHIP**  
 Statutory Authority: 7 Delaware Code, Section 6010 (7 Del.C. §6010)  
 7 DE Admin. Code 7401

**REGISTER NOTICE**  
**SAN # 2016-15**

7401 Surface Water Quality Standards

**1. TITLE OF THE REGULATIONS:**

7401 Surface Water Quality Standards

**2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:**

The DNREC-Watershed Assessment and Management Branch has revised the proposed amendments to Delaware Administrative Code 7401: Surface Water Quality Standards following a thorough review. The proposed amendments to the Water Quality Standards Regulations were published in the January 1, 2017 Delaware *Register of Regulations*. These revisions to the proposed amendments address sections that linked to incorrect sections in the regulation and Department. The revisions also include amendments by DNREC resulting from written comments during the initial public comment period which ended February 23, 2017.

**3. POSSIBLE TERMS OF THE AGENCY ACTION:**

N/A

**4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:**

7 Del.C. §6010

**5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:**

Regulations Governing the Control of Water Pollution

**6. NOTICE OF PUBLIC COMMENT:**

The hearing record on the proposed changes to 7 DE Admin. Code 7401: Surface Water Quality Standards will be re-opened May 1, 2017 for a 45-day public comment period ending June 15, 2017. Individuals may submit written comments regarding the revisions to the proposed amendments via e-mail to Lisa.Vest@state.de.us or via the USPS to Lisa Vest, Hearing Officer, DNREC, 89 Kings Highway, Dover, DE 19901 (302) 739-9042.

**7. PREPARED BY:**

David Wolanski     David.Wolanski@state.de.us     (302)-739-9939

Delaware's most recent Water Quality Standards Regulations were promulgated 10/01/2014. Under the Federal Beaches Environmental Assessment and Coastal Health (BEACH) Act, states are required to update their water quality criteria to meet updated federal Environmental Protection Agency guidance for bacterial water quality. Secretary David Small approved Start Action Notice 2016-15 on 12/13/2016 to update Delaware Water Quality Standards Section 4.5.7.1. The proposed updates were published in the Delaware *Register* on January 1, 2017. A public hearing on the proposed updates was held February 23, 2017 in the DNREC Auditorium. Comments submitted by Evelyn MacKnight of US EPA Region 3 regarding the updates suggested several revisions the Department concurred with. Staff also proposed fixing two technical issues in the 10/01/2014 regulation. The proposed regulations and updated proposed regulations are shown in the sections that follow.

Interested parties shall submit comments in writing on the amendments by June 15, 2017. Written statements

and comments should be addressed to Lisa.Vest@state.de.us or by USPS to:

Lisa Vest  
 DNREC - Hearing Officer  
 DNREC, 89 Kings Highway, Dover, DE 19901

**Original Proposed Language as shown in the January 1, 2017 Register notice:**

4.5.7 Bacterial Water Quality Criteria

4.5.7.1 Primary and Secondary Contact Recreation Waters:

The following criteria shall apply:

Waterbody Type	Single-Sample Value  (Enterococcus Colonies/100ml)	Geometric Mean (Enterococcus Colonies/100ml)
Primary Contact Recreation Fresh Waters	185	100
Primary Contact Recreation Marine Waters	104	35
Secondary Contact Recreation Fresh Waters	925	500
Secondary Contact Recreation Marine Waters	520	175
<u>Atlantic Ocean Waters from Cape Henlopen to the Delaware/Maryland State Line</u>	<u>The statistical threshold value of weekly samples collected over a 30 day period shall not exceed 130 in more than 10 percent of the samples collected.</u>	<u>The Geometric Mean of weekly samples collected over a 30 day period shall not exceed 35.</u>

The purpose of these criteria is to provide the Department with a basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State and to meet Federal Beaches Environmental Assessment and Coastal Health (BEACH) Act Requirements. The criteria apply to enterococcus bacteria determined by the Department to be of non-wildlife origin based on best scientific judgment using available information. Swimming in waters affected by runoff during runoff periods may present an elevated risk of gastrointestinal illness and is not recommended.

**Updated Proposed Regulations:**

(in section 2.0)

"Public Water Supply" means any waters of the State designated as public water supply in Section 40 3

(in section 3j)

(j) Parts of these waters are APPROVED shellfish harvesting areas. Information on areas where shellfish may be taken should be obtained from the Shellfish & Recreational Waters Branch, Watershed Assessment Section,

## PROPOSED REGULATIONS

Division of ~~Water Resources~~ Watershed Stewardship, Department of Natural Resources and Environmental Control.

### 4.5.7 Bacterial Water Quality Criteria

#### 4.5.7.1 Primary and Secondary Contact Recreation Waters:

The following criteria shall apply:

Waterbody Type	Single-Sample Value (Enterococcus Colonies/100ml)	Geometric Mean (Enterococcus Colonies/100ml)	Statistical Threshold Value
Primary Contact Recreation Fresh Waters	185	100	
Primary Contact Recreation Marine Waters	104	35	
Secondary Contact Recreation Fresh Waters	925	500	
Secondary Contact Recreation Marine Waters	520	175	
<u>Marine Coastal Recreation Waters from the Delaware Bay to the Maryland State Line</u>		<u>The Geometric Mean of samples collected over a 30 day period shall not exceed 35.</u>	<u>The statistical threshold value of samples collected over a 30 day period shall not exceed 130 in more than 10 percent of the samples collected.</u>

The purpose of these criteria is to provide the Department with a basis to assess water quality trends and pollution control needs with regard to primary and secondary contact recreation in waters of the State and to meet Federal Beaches Environmental Assessment and Coastal Health (BEACH) Act Requirements. The criteria apply to enterococcus bacteria determined by the Department to be of non-wildlife origin based on best scientific judgment using available information. Swimming in waters affected by runoff during runoff periods may present an elevated risk of gastrointestinal illness and is not recommended.

**\*Please Note:**

(1) **The Regulatory Flexibility Analysis and Impact Statement for this regulation, as required by 29 Del.C. Ch. 104, is available at:**

[http://regulations.delaware.gov/register/may2017/proposed/20 DE Reg 880RFA 05-01-17.pdf](http://regulations.delaware.gov/register/may2017/proposed/20%20DE%20Reg%20880RFA%2005-01-17.pdf)

(2) **Due to the size of the proposed regulation, it is not being published here. A copy of the regulation is available at:**

7401 Surface Water Quality Standards



## **APPENDIX "B"**





STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL  
DIVISION OF WATERSHED STEWARDSHIP  
89 Kings Highway  
DOVER, DELAWARE 19901

OFFICE OF THE  
DIRECTOR



PHONE: (302) 739-9921  
FAX: (302) 739-6724

From: David Wolanski, Environmental Scientist, Responsible Staff Member

To: Lisa Vest, Hearing Officer

Re: Water Quality Standards Update Technical Response Memo

7/21/17

**Background**

Delaware's most recent Water Quality Standards Regulations were promulgated 10/01/2014. Under the Federal Beaches Environmental Assessment and Coastal Health (BEACH) Act, states are required to update their water quality criteria to meet updated federal Environmental Protection Agency guidance for bacterial water quality. Secretary David Small approved Start Action Notice 2016-15 on 12/13/2016 to update Delaware Water Quality Standards section 4.5.7.1. The proposed updates were published in the Delaware Register January 1, 2017. A public hearing on the proposed updates was held February 23<sup>rd</sup> at the DNREC Auditorium in Dover. Documents the Department relied on to propose the updated criteria were submitted as exhibits at the hearing. No members of the public came to the hearing or submitted comments. The only comments received during the comment period were submitted by Evelyn S. MacKnight of U.S. EPA, Region 3. Those comments are attached in their entirety as an appendix. Salient comments are responded to below.

**EPA Comments and Responses**

- 1) "EPA has reviewed the proposed amendments in the website of the public notice... and suggests several revisions to the amendments for the purposes of clarification and to ensure the proposed criteria for coastal recreation waters, is consistent with EPA's recommended Recreation Water Quality Criteria (EPA820-F-12-058,2012)... EPA is requesting DNREC consider the following revisions to the amended table... providing a separate column for the STV would provide clarity that the application of the magnitude (i.e, 130 CFU/100ml) differs from the remaining single sample values."

*The Department concurs and has added the suggested column for the Statistical Threshold Value in the final regulation.*

*Delaware's good nature depends on you!*

- 2) "EPA recommends striking the use of the term 'weekly' for sampling frequency. Setting a weekly frequency threshold as component of the criteria may not be appropriate since samples may be taken more frequently at some location whether routinely or as a result of compliance follow up. All data collected in the 30 day period should be used to determine compliance"

*EPA's updated criteria guidance values for coastal beaches are based on geometric means of 5 or more samples collected in 30 days. The key words are "or more". States typically collect such data in monitoring programs based on sampling frequencies of one or more samples per week at coastal beaches that are also guarded for public safety at these high use sites. As always, more data is better than less. The Department has removed the "weekly" term, and expects to use 5 or more samples collected in 30 days for any regulatory decisions for coastal beach waters.*

- 3) "It appears that the revisions apply these Recreational Water Quality Criteria to Atlantic Ocean Waters only, and that Delaware Bay Beaches will not be covered by these criteria amendments. In order to fully comply with the CWA, as amended by the BEACH Act, these criteria must apply to all coastal recreation waters... Appropriate revisions should be made to ensure that the revised criteria apply to all Delaware Bay Beaches. "

*The Department changed the description of the applicable waters from "Atlantic Ocean Waters from Cape Henlopen to Delaware/Maryland State Line" to "Marine Coastal Recreation Waters from the Delaware Bay to the Maryland State Line" to fully comply with the Clean Water and BEACH Acts.*

Due to the fact that the above changes were made by the Department subsequent to the hearing record having closed for public comment, the decision was made to republish this revised proposed regulation (with said changes incorporated in the same) in the Delaware Register of Regulations, and to reopen the public comment period for an additional forty-five (45) days, so as to provide complete transparency to the public with regard to this rule-making process.

Accordingly, the Department republished the revised proposed regulation in the Delaware Register of Regulations on May 1, 2017, and reopened the hearing record for public comment through close of business on June 15, 2017. US EPA Region 3 was the sole commenter on the revised proposed regulation, having advised that EPA supported the revised criteria as published in the May 1<sup>st</sup> Register. See the Appendix for EPA's May 18<sup>th</sup> comment letter.

### **Conclusion**

After reviewing the comments submitted, the Division of Watershed Stewardship endorses the above responses and recommendations for inclusion in the Hearing Officer's Report.

## Appendix





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

FEB 22 2017

Ms. Lisa Vest, Hearing Officer  
Department of Natural Resources  
and Environmental Control  
89 Kings Highway  
Dover, Delaware 19901

Dear Ms. West:

In a public noticed dated January 8, 2017, the Delaware Department of Natural Resources and Environmental Control (DNREC) announced that a public hearing will take place on February 23, 2016 for the purpose of soliciting comments on the proposed amendments to Delaware's Water Quality Standards. Specifically, these amendments are for updating bacteria water quality standards in Section 4.5.7.1 of Title 7 of the Delaware Administrative Code (Natural Resources & Environmental Control), 7400 Watershed Assessment Section, 7401 Surface Water Quality Standards. The United State Environmental Protection Agency (USEPA) is pleased to see that DNREC is proposing to adopt the marine recreational bacteria standards EPA published in 2012 and can be found in EPA 820-F-12-058: Recreational Water Quality Criteria. EPA comments on this amendment may be found in the enclosure to this letter.

Please note that the comments and recommendations contained in this letter are strictly for DNREC's consideration and do not constitute approval or disapproval decisions under Clean Water Act 303(c) and 40 CFR §131.21. Neither are these comments a determination by the EPA Administrator under CWA Section 303(c)(4)(B) and 40 CFR §131.22(c) that revised or new standards are necessary to meet the requirements of the Act. If you have any questions, please do not hesitate to contact me at 214-814-5717 or Mark A. Barath at 215-814-2759.

Sincerely,

A handwritten signature in cursive script that reads "Evelyn S. MacKnight".

Evelyn S. MacKnight, Associate Director  
Office of Standards, Assessment and TMLDs  
Water Protection Division

Enclosure  
cc: David Wolanski, DNREC



Enclosure

EPA is pleased to see that DNREC has started the process of revising 7401 Surface Water Quality Standards Section 4.5.7, Bacteria Water Quality Standards, with the January 8, 2017 release of a Public Notice stating that a public hearing on the above proposed amendments will take place on February 23, 2017. The unofficial notice of this proposed amendment occurred December 21, 2016 with the amendment remained unchanged. DNREC is proposing these revisions in order to comply with the Clean Water Act (CWA), as amended by the BEACH Act, at §303(i)(1)(B).

EPA has reviewed the proposed amendments in the website of the public notice (<http://www.dnrec.delaware.gov/swc/wa/Pages/Watershed%20Assessment%20Surface%20Water%20Quality%20Management.aspx>) and suggests several revisions to the amendments for the purposes of clarification and to ensure the proposed criteria for coastal recreation waters, is consistent with EPA's recommended Recreation Water Quality Criteria (EPA820-F-12-058, 2012). The proposed amendments revised the table in 4.5.7.1, Primary and Secondary Contact Recreation Waters, is as follows (actual proposed revisions are highlighted):

4.5.7.1 Primary and Secondary Contact Recreation Waters:

The following criteria shall apply:

Waterbody Type	Single-Sample Value (Enterococcus Colonies/100ml)	Geometric Mean (Enterococcus Colonies/100ml)
Primary Contact Recreation Fresh Waters	185	100
Primary Contact Recreation Marine Waters	104	35
Secondary Contact Recreation Fresh Waters	925	500
Secondary Contact Recreation Marine Waters	520	175
<u>Atlantic Ocean Waters from Cape Henlopen to the Delaware/Maryland State Line</u>	<u>The statistical threshold value of weekly samples collected over a 30 day period shall not exceed 130 in more than 10 percent of the samples collected.</u>	<u>The Geometric Mean of weekly samples collected over a 30 day period shall not exceed 35.</u>

The EPA is requesting DNREC consider the following revisions to the amended table. EPA suggested revisions are highlighted in yellow. The rationale for the proposed revisions are as follows:

EPA considers putting the Statistical Threshold Value (STV) criteria under the Single-Sample Value column would cause confusion since these are two different approaches to determining protection of the Delaware's primary contact recreation designated use. In EPA's Ambient Water Quality Criteria for Bacteria – 1986 (EPA440/5-84-002), EPA recommended the use of Single Sample Maximum (SSM) values, which were derived from upper percentiles of the water quality distribution around the geometric mean (GM) values. However, the SSM was treated as a never to be exceeded value, imparting a level of protection much more stringent than intended by the 1986 criteria GM value. To correct this issue, in the 2012 Recreational Water Quality Criteria recommends the adoption of an STV. The STV is based on the estimated 90<sup>th</sup> percentile of the water quality distribution to take into account the expected variability in water quality measurements, while limiting the number of samples allowed to exceed the STV, before deciding water quality is impaired. As the unrevised values in the Single-Sample Value column are all based on EPA's 1986 recommended SSMs, providing a separate column for the STV would provide clarity that the application of the magnitude (i.e., 130 cfu/100 mL) differs from the remaining single sample values. In addition, adding a separate column will avoid any confusion as to the application of the unrevised values in the "single-sample value" column.

- EPA recommends striking the use of the term 'weekly' for sampling frequency. Setting a weekly frequency threshold as component of the criteria may not be appropriate since samples may be taken more frequently at some location whether routinely or as result of compliance follow-up. All data collected in the 30-day period should be used to determine compliance.

#### 4.5.7.1 Primary and Secondary Contact Recreation Waters

Waterbody Type	Single-Sample Value	Geometric Mean (enterococcus colonics/100ml)	Statistical Threshold Value
Primary Contact Recreation Fresh waters	185	100	
Primary Contact Recreation Marine Waters	104	35	
Secondary Contact Recreation Fresh waters	925	500	
Secondary Contact Recreation Marine Waters	520	175	
Atlantic Ocean Waters from Cape Henlopen to Delaware/Maryland State Line and Delaware Bay Beach Waters	The statistical threshold value of Weekly samples collected over 30-day period shall not exceed 139 in more that 10 percent of samples	The Geometric Mean of Weekly samples collected over 30-day period shall not exceed 35	The statistical threshold value of samples collected over 30-day period shall not exceed 139 in more that 10 percent of samples

- It appears that the revisions apply these Recreational Water Quality Criteria to Atlantic Ocean Waters only, and that Delaware Bay Beaches will not be covered by these criteria amendments. In order to fully comply with the CWA, as amended by the BEACH Act, these criteria must apply to all coastal recreation waters. Coastal recreation waters are defined by the CWA as follows:

**SEC. 5. DEFINITIONS.**

Section 502 of the Federal Water Pollution Control Act (33U.S.C. 1362) is amended by adding at the end the following:

“(21) COASTAL RECREATION WATERS.—

“(A) IN GENERAL.—The term ‘coastal recreation waters’ means—

“(i) the Great Lakes; and

“(ii) marine coastal waters (including coastal estuaries) that are designated under section 303(c) by a State for use for swimming, bathing, surfing, or similar water contact activities.

- DNREC is using Federal BEACH Act funds for monitoring, reporting and notification of several Delaware Bay Beaches, specifically Lewes Beach North and Lewes Beach South. Under the proposed revised provisions, it appears the revised criteria would not apply to these two beaches. EPA believes these beaches meet the definition of a coastal recreation water. Appropriate revisions should be made to ensure that the revised criteria apply to all Delaware Bay beaches as well.









UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Ms. Lisa Vest, Hearing Officer  
Department of Natural Resources  
and Environmental Control  
89 Kings Highway  
Dover, Delaware 19901

MAY 18 2017

Dear Ms. West:

In a public notice dated January 8, 2017, the Delaware Department of Natural Resources and Environmental Control (DNREC) announced that a public hearing will take place on February 23, 2016 for the purpose of soliciting comments on the proposed amendments to Delaware's Water Quality Standards. Specifically, these amendments are for updating bacteria water quality standards in Section 4.5.7.1 of Title 7 of the Delaware Administrative Code (Natural Resources & Environmental Control), 7400 Watershed Assessment Section, 7401 Surface Water Quality Standards. On May 1, 2017, a public notice was released reopening a 45-day public comment period ending June 15, 2017. The purpose of this reopening is to allow comments on several revisions to the proposed amendments.

The United State Environmental Protection Agency (EPA) is pleased to see that DNREC is proposing to adopt the suggested criteria changes identified in EPA's February 22, 2017 comment letter. In the enclosure, please see EPA's support for the proposed criteria changes. Other proposed technical changes are not substantive and EPA will not provide any further comments.

Please note that the comments and recommendations contained in this letter are strictly for DNREC's consideration and do not constitute approval or disapproval decisions under Clean Water Act 303(c) and 40 CFR §131.21. Neither are these comments a determination by the EPA Administrator under CWA Section 303(c)(4)(B) and 40 CFR §131.22(c) that revised or new standards are necessary to meet the requirements of the Act. If you have any questions, please do not hesitate to contact me at 214-814-5717 or Mark A. Barath at 215-814-2759.

Sincerely,

A handwritten signature in cursive script that reads "Evelyn S. MacKnight".

Evelyn S. MacKnight, Associate Director  
Office of Standards, Assessment and TMLDs  
Water Protection Division

Enclosure

cc: David Wolanski, DNREC



Enclosure

EPA is pleased to see that DNREC has started the process of revising 7401 Surface Water Quality Standards Section 4.5.7, Bacteria Water Quality Standards. DNREC is proposing these revisions in order to comply with the Clean Water Act (CWA), as amended by the BEACH Act, at §303(i)(1)(B), which covers Delaware Bay waters as coastal waters under the BEACH Act. The revision of criteria in the 7401 Section 4.5.7.1 are in line with EPA recommendations. The Statistical Threshold Value will supplement the protection provided by the Delaware River Basin Commission Enterococcus criteria of which DNREC Geometric Mean Enterococcus criteria provide equivalent protection.

4.5.7.1 Primary and Secondary Contact Recreation Waters

Waterbody Type	Single-Sample Value (enterococcus colonies/100ml)	Geometric Mean (enterococcus colonies/100ml)	Statistical Threshold Value
Primary Contact Recreation Fresh waters	185	100	
Primary Contact Recreation Marine Waters	104	35	
Secondary Contact Recreation Fresh waters	925	500	
Secondary Contact Recreation Marine Waters	520	175	
Marine Coastal Recreation Waters from the Delaware Bay to Maryland State Line		The Geometric Mean of samples collected over 30-day period shall not exceed 35	The statistical threshold value of samples collected over 30-day period shall not exceed 130 in more that 10 percent of samples

