



# COLORADO

Water Quality  
Control Commission

Department of Public Health & Environment

## NOTICE OF PUBLIC RULEMAKING HEARING BEFORE THE COLORADO WATER QUALITY CONTROL COMMISSION

### SUBJECT:

For consideration of the adoption of revisions the Site-Specific Water Quality Classifications and Standards for Ground Water, Regulation #42 (5 CCR 1002-42). Revisions proposed by the Hazardous Materials and Waste Management Division, along with a proposed Statement of Basis, Specific Statutory Authority and Purpose, are attached to this notice as Exhibit 1.

In these attachments, proposed new language is shown with double-underlining and proposed deletions are shown with ~~strikeouts~~. Any alternative proposals related to the subject of this hearing will also be considered.

### SCHEDULE OF IMPORTANT DATES

Party status requests due	01/17/2018 5 pm	Additional information below.
Proponent's prehearing statement due	01/24/2018 5 pm	Additional information below.
Responsive prehearing statements due	02/21/2018 5 pm	Additional information below.
Rebuttal statements due	03/20/2018 5 pm	Additional information below.
Last date for submittal of motions	03/21/2018 5 pm	Additional information below.
Notify commission office if participating in prehearing conference by phone	03/23/2018 by noon	Send email to <a href="mailto:cdphe.wqcc@state.co.us">cdphe.wqcc@state.co.us</a> with participant(s) name(s)
<b>Prehearing Conference</b> (mandatory for parties)	03/26/2018 1:00 pm	Florence Sabin Conference Room Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, CO 80246 Call-in: 1-857-216-6700, Code: 425132
<b>Rulemaking Hearing</b>	04/09/2018 12:00 pm	Florence Sabin Conference Room Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, CO 80246

### HEARING SUBMITTALS:

For this hearing, the commission will receive all submittals electronically. Submittals must be provided as PDF documents, except for raw data exhibits which may be provided as Excel workbooks. Submittals may be emailed to [cdphe.wqcc@state.co.us](mailto:cdphe.wqcc@state.co.us), provided via an FTP site,

CD or flash drive, or otherwise conveyed to the commission office so as to be received no later than the specified date.

PARTY STATUS:

Party status requests must be in writing and must provide:

- the organization's name,
- one contact person,
- a mailing address,
- a phone number, and
- email addresses of all individuals associated with the party who wish to be notified when new submittals are available on the commission's website for review.

In accordance with section 25-8-104(2)(d), C.R.S., any person who believes that the actions proposed in this notice have the potential to cause material injury to his or her water rights is requested to so indicate, along with an explanation of the alleged harm, in their party status request.

PREHEARING AND REBUTTAL STATEMENTS:

Each party must submit a prehearing statement: parties that have proposed revisions attached as exhibits to the notice must submit a proponent's prehearing statement. All other parties must submit a responsive prehearing statement. Proponents may also submit responsive prehearing statements when there are multiple proposals attached to the notice.

Each prehearing and rebuttal statement must be provided as a separate PDF document from any accompanying written testimony or exhibits.

Following the rebuttal statement due date, no other written materials will be accepted from parties except for good cause shown.

Oral testimony at the hearing should primarily summarize written material previously submitted. The hearing will emphasize commission questioning of parties and other interested persons about their written prehearing submittals. Introduction of written material at the hearing by those with party status will not be permitted unless authorized by the commission.

PREHEARING CONFERENCE:

**Attendance at the prehearing conference is mandatory for all persons requesting party status.** Parties needing to participate by telephone are encouraged to notify the commission office prior to the prehearing conference. Remote participants can call 1-857-216-6700 and enter the conference code 425132.

Following the cut-off date for motions, no motions will be accepted, except for good cause shown.

PUBLIC PARTICIPATION ENCOURAGED:

The commission encourages input from non-parties, either orally at the hearing or in writing prior to the hearing. Written submissions should be emailed to [cdphe.wqcc@state.co.us](mailto:cdphe.wqcc@state.co.us) by March 28, 2018.

SPECIFIC STATUTORY AUTHORITY:

The provisions of sections 25-8-202(1)(a), (b), and (2); 25-8-203; 25-8-204; and 25-8-402, C.R.S., provide the specific statutory authority for consideration of the regulatory amendments proposed by this notice. Should the commission adopt the regulatory language as proposed in this notice or alternative amendments, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.

Dated this 11<sup>th</sup> day of December, 2017 at Denver, Colorado.

WATER QUALITY CONTROL COMMISSION

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Trisha Oeth, Administrator

# EXHIBIT 1

## WATER QUALITY CONTROL DIVISION

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 42 - SITE-SPECIFIC WATER QUALITY CLASSIFICATIONS AND STANDARDS FOR GROUND WATER

5 CCR 1002-42

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### 42.7 SITE-SPECIFIC GROUND WATER CLASSIFICATIONS AND WATER QUALITY STANDARDS

The statewide standards for organic chemicals and radioactive materials set forth in section 41.5 C of The Basic Standards for Ground Water apply to all ground water for which site specific classifications and standards have been adopted, unless the Commission specifies otherwise in the site-specific standards for a particular specified area.

The following classifications and standards shall not be interpreted so as to cause material injury to water rights in accordance with 25-8-104 C.R.S. (1989):

....

(7) **CITY OF FOUNTAIN, SECURITY WATER & SANITATION DISTRICT, STRATMOOR HILLS WATER DISTRICT, AND WIDFIELD HOMES WATER COMPANY WELLFIELDS, EL PASO COUNTY. SPECIFIED AREA INCLUDES THE WIDFIELD AQUIFER, WINDMILL GULCH AQUIFER, SAND CREEK AQUIFER, CREWS GULCH AQUIFER, FOUNTAIN CREEK ALLUVIAL AQUIFER AND OTHER ADJACENT UNCONFINED AQUIFERS IN EL PASO COUNTY.**

(a) Specified Area: All confined and unconfined ground waters within the saturated zone underlying the area as illustrated in Figure 7. Maps depicting each specified area on a larger scale are available in the Commission Office. Following Public Land Survey System (PLSS) sections in El Paso County (Figure 7):

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>T13S</u>	<u>R65W</u>	<u>S30</u>	<u>T14S</u>	<u>R65W</u>	<u>S28</u>
<u>T13S</u>	<u>R65W</u>	<u>S31</u>	<u>T14S</u>	<u>R65W</u>	<u>S29</u>
<u>T13S</u>	<u>R66W</u>	<u>S36</u>	<u>T14S</u>	<u>R65W</u>	<u>S30</u>
<u>T14S</u>	<u>R64W</u>	<u>S19</u>	<u>T14S</u>	<u>R65W</u>	<u>S31</u>
<u>T14S</u>	<u>R64W</u>	<u>S30</u>	<u>T14S</u>	<u>R65W</u>	<u>S32</u>
<u>T14S</u>	<u>R65W</u>	<u>S06</u>	<u>T14S</u>	<u>R65W</u>	<u>S33</u>

<u>T14S</u>	<u>R65W</u>	<u>S07</u>	<u>T14S</u>	<u>R65W</u>	<u>S34</u>
<u>T14S</u>	<u>R65W</u>	<u>S15</u>	<u>T14S</u>	<u>R65W</u>	<u>S35</u>
<u>T14S</u>	<u>R65W</u>	<u>S16</u>	<u>T14S</u>	<u>R65W</u>	<u>S36</u>
<u>T14S</u>	<u>R65W</u>	<u>S17</u>	<u>T14S</u>	<u>R66W</u>	<u>S01</u>
<u>T14S</u>	<u>R65W</u>	<u>S18</u>	<u>T14S</u>	<u>R66W</u>	<u>S12</u>
<u>T14S</u>	<u>R65W</u>	<u>S19</u>	<u>T14S</u>	<u>R66W</u>	<u>S13</u>
<u>T14S</u>	<u>R65W</u>	<u>S20</u>	<u>T14S</u>	<u>R66W</u>	<u>S14</u>
<u>T14S</u>	<u>R65W</u>	<u>S21</u>	<u>T14S</u>	<u>R66W</u>	<u>S19</u>
<u>T14S</u>	<u>R65W</u>	<u>S22</u>	<u>T14S</u>	<u>R66W</u>	<u>S20</u>
<u>T14S</u>	<u>R65W</u>	<u>S23</u>	<u>T14S</u>	<u>R66W</u>	<u>S21</u>
<u>T14S</u>	<u>R65W</u>	<u>S24</u>	<u>T14S</u>	<u>R66W</u>	<u>S22</u>
<u>T14S</u>	<u>R65W</u>	<u>S25</u>	<u>T14S</u>	<u>R66W</u>	<u>S23</u>
<u>T14S</u>	<u>R65W</u>	<u>S26</u>	<u>T14S</u>	<u>R66W</u>	<u>S24</u>
<u>T14S</u>	<u>R65W</u>	<u>S27</u>	<u>T14S</u>	<u>R66W</u>	<u>S25</u>
<u>T14S</u>	<u>R66W</u>	<u>S26</u>	<u>T15S</u>	<u>R65W</u>	<u>S17</u>
<u>T14S</u>	<u>R66W</u>	<u>S27</u>	<u>T15S</u>	<u>R65W</u>	<u>S18</u>
<u>T14S</u>	<u>R66W</u>	<u>S28</u>	<u>T15S</u>	<u>R65W</u>	<u>S19</u>
<u>T14S</u>	<u>R66W</u>	<u>S29</u>	<u>T15S</u>	<u>R65W</u>	<u>S20</u>
<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>T14S</u>	<u>R66W</u>	<u>S30</u>	<u>T15S</u>	<u>R65W</u>	<u>S21</u>
<u>T14S</u>	<u>R66W</u>	<u>S32</u>	<u>T15S</u>	<u>R65W</u>	<u>S22</u>
<u>T14S</u>	<u>R66W</u>	<u>S33</u>	<u>T15S</u>	<u>R65W</u>	<u>S23</u>
<u>T14S</u>	<u>R66W</u>	<u>S34</u>	<u>T15S</u>	<u>R65W</u>	<u>S26</u>
<u>T14S</u>	<u>R66W</u>	<u>S35</u>	<u>T15S</u>	<u>R65W</u>	<u>S27</u>
<u>T14S</u>	<u>R66W</u>	<u>S36</u>	<u>T15S</u>	<u>R65W</u>	<u>S28</u>
<u>T15S</u>	<u>R65W</u>	<u>S01</u>	<u>T15S</u>	<u>R65W</u>	<u>S29</u>
<u>T15S</u>	<u>R65W</u>	<u>S02</u>	<u>T15S</u>	<u>R65W</u>	<u>S30</u>
<u>T15S</u>	<u>R65W</u>	<u>S03</u>	<u>T15S</u>	<u>R65W</u>	<u>S31</u>

<u>T15S</u>	<u>R65W</u>	<u>S04</u>	<u>T15S</u>	<u>R65W</u>	<u>S32</u>
<u>T15S</u>	<u>R65W</u>	<u>S05</u>	<u>T15S</u>	<u>R65W</u>	<u>S33</u>
<u>T15S</u>	<u>R65W</u>	<u>S06</u>	<u>T15S</u>	<u>R65W</u>	<u>S34</u>
<u>T15S</u>	<u>R65W</u>	<u>S07</u>	<u>T15S</u>	<u>R66W</u>	<u>S01</u>
<u>T15S</u>	<u>R65W</u>	<u>S08</u>	<u>T15S</u>	<u>R66W</u>	<u>S02</u>
<u>T15S</u>	<u>R65W</u>	<u>S09</u>	<u>T15S</u>	<u>R66W</u>	<u>S03</u>
<u>T15S</u>	<u>R65W</u>	<u>S10</u>	<u>T15S</u>	<u>R66W</u>	<u>S04</u>
<u>T15S</u>	<u>R65W</u>	<u>S11</u>	<u>T15S</u>	<u>R66W</u>	<u>S10</u>
<u>T15S</u>	<u>R65W</u>	<u>S12</u>	<u>T15S</u>	<u>R66W</u>	<u>S11</u>
<u>T15S</u>	<u>R65W</u>	<u>S13</u>	<u>T15S</u>	<u>R66W</u>	<u>S12</u>
<u>T15S</u>	<u>R65W</u>	<u>S14</u>	<u>T15S</u>	<u>R66W</u>	<u>S13</u>
<u>T15S</u>	<u>R65W</u>	<u>S15</u>	<u>T15S</u>	<u>R66W</u>	<u>S14</u>
<u>T15S</u>	<u>R65W</u>	<u>S16</u>	<u>T15S</u>	<u>R66W</u>	<u>S15</u>
<u>T15S</u>	<u>R66W</u>	<u>S23</u>	<u>T16S</u>	<u>R65W</u>	<u>S32</u>
<u>T15S</u>	<u>R66W</u>	<u>S24</u>	<u>T16S</u>	<u>R65W</u>	<u>S33</u>
<u>T15S</u>	<u>R66W</u>	<u>S25</u>	<u>T16S</u>	<u>R65W</u>	<u>S34</u>
<u>T15S</u>	<u>R66W</u>	<u>S26</u>	<u>T16S</u>	<u>R66W</u>	<u>S01</u>
<u>T15S</u>	<u>R66W</u>	<u>S36</u>	<u>T16S</u>	<u>R66W</u>	<u>S08</u>
<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>T16S</u>	<u>R65W</u>	<u>S03</u>	<u>T16S</u>	<u>R66W</u>	<u>S09</u>
<u>T16S</u>	<u>R65W</u>	<u>S04</u>	<u>T16S</u>	<u>R66W</u>	<u>S10</u>
<u>T16S</u>	<u>R65W</u>	<u>S05</u>	<u>T16S</u>	<u>R66W</u>	<u>S11</u>
<u>T16S</u>	<u>R65W</u>	<u>S06</u>	<u>T16S</u>	<u>R66W</u>	<u>S12</u>
<u>T16S</u>	<u>R65W</u>	<u>S07</u>	<u>T16S</u>	<u>R66W</u>	<u>S13</u>
<u>T16S</u>	<u>R65W</u>	<u>S08</u>	<u>T16S</u>	<u>R66W</u>	<u>S14</u>
<u>T16S</u>	<u>R65W</u>	<u>S09</u>	<u>T16S</u>	<u>R66W</u>	<u>S15</u>
<u>T16S</u>	<u>R65W</u>	<u>S10</u>	<u>T16S</u>	<u>R66W</u>	<u>S16</u>
<u>T16S</u>	<u>R65W</u>	<u>S15</u>	<u>T16S</u>	<u>R66W</u>	<u>S17</u>

<u>T16S</u>	<u>R65W</u>	<u>S16</u>	<u>T16S</u>	<u>R66W</u>	<u>S20</u>
<u>T16S</u>	<u>R65W</u>	<u>S17</u>	<u>T16S</u>	<u>R66W</u>	<u>S21</u>
<u>T16S</u>	<u>R65W</u>	<u>S18</u>	<u>T16S</u>	<u>R66W</u>	<u>S22</u>
<u>T16S</u>	<u>R65W</u>	<u>S19</u>	<u>T16S</u>	<u>R66W</u>	<u>S23</u>
<u>T16S</u>	<u>R65W</u>	<u>S20</u>	<u>T16S</u>	<u>R66W</u>	<u>S24</u>
<u>T16S</u>	<u>R65W</u>	<u>S21</u>	<u>T16S</u>	<u>R66W</u>	<u>S25</u>
<u>T16S</u>	<u>R65W</u>	<u>S22</u>	<u>T16S</u>	<u>R66W</u>	<u>S26</u>
<u>T16S</u>	<u>R65W</u>	<u>S27</u>	<u>T16S</u>	<u>R66W</u>	<u>S27</u>
<u>T16S</u>	<u>R65W</u>	<u>S28</u>	<u>T16S</u>	<u>R66W</u>	<u>S28</u>
<u>T16S</u>	<u>R65W</u>	<u>S29</u>	<u>T16S</u>	<u>R66W</u>	<u>S29</u>
<u>T16S</u>	<u>R65W</u>	<u>S30</u>	<u>T16S</u>	<u>R66W</u>	<u>S31</u>
<u>T16S</u>	<u>R65W</u>	<u>S31</u>	<u>T16S</u>	<u>R66W</u>	<u>S32</u>
<u>T16S</u>	<u>R66W</u>	<u>S33</u>	<u>T17S</u>	<u>R66W</u>	<u>S03</u>
<u>T16S</u>	<u>R66W</u>	<u>S34</u>	<u>T17S</u>	<u>R66W</u>	<u>S04</u>
<u>T16S</u>	<u>R66W</u>	<u>S35</u>	<u>T17S</u>	<u>R66W</u>	<u>S05</u>
<u>T16S</u>	<u>R66W</u>	<u>S26</u>	<u>T17S</u>	<u>R66W</u>	<u>S06</u>
<u>T17S</u>	<u>R65W</u>	<u>S03</u>	<u>T17S</u>	<u>R66W</u>	<u>S07</u>
<u>T17S</u>	<u>R65W</u>	<u>S04</u>	<u>T17S</u>	<u>R66W</u>	<u>S08</u>
<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>
<u>T17S</u>	<u>R65W</u>	<u>S05</u>	<u>T17S</u>	<u>R66W</u>	<u>S09</u>
<u>T17S</u>	<u>R65W</u>	<u>S06</u>	<u>T17S</u>	<u>R66W</u>	<u>S10</u>
<u>T17S</u>	<u>R65W</u>	<u>S09</u>	<u>T17S</u>	<u>R66W</u>	<u>S11</u>
<u>T17S</u>	<u>R65W</u>	<u>S10</u>	<u>T17S</u>	<u>R66W</u>	<u>S12</u>
<u>T17S</u>	<u>R66W</u>	<u>S01</u>	<u>T17S</u>	<u>R66W</u>	<u>S17</u>
<u>T17S</u>	<u>R66W</u>	<u>S02</u>	<u>T17S</u>	<u>R66W</u>	<u>S18</u>

(b) Classifications: The classifications of the confined and unconfined ground water in the specified area are:

- Domestic Use-Quality
- Agricultural Use-Quality

(c) Ground Water Quality Standards: For the specified area, the ground water quality standards included in Tables 1 - 4, the Radioactive Materials Standards Table, and the organic chemical standards in Table A of the "Basic Standards for Ground Water" 41.0 (5 CCR 1002-41) are assigned to all ~~confined and unconfined ground water in the specified area~~ groundwater.

(d) Additional Ground Water Quality Standards for the Specified Area:

i) The sum of Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) = 0.070 micrograms per liter.

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## 42.8 FIGURES

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**[Insert modified Area 7 map here]**

## **PROPOSED**

### **42.37 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: April 9, 2018 RULEMAKING; FINAL ACTION MAY 7, 2018; EFFECTIVE DATE JUNE 30, 2018**

The provisions of C.R.S. sections 25-8-202; 25-8-203; 25-8-204; 25-8-402, provide the specific statutory authority for adoption of this regulation. The Commission also adopted, in compliance with section 24-4-103(4) the following statement of basis and purpose.

#### **BASIS AND PURPOSE:**

##### **Site-Specific Classification**

The Use Classifications adopted by the WQCC in 1993 for specified area 7 (Section 42.2(7)) are appropriate for the current and future uses of the aquifer. Therefore, as a result of this hearing, the Commission maintained the current classifications of Domestic Use-Quality and Agricultural Use-Quality for specified area 7.

##### **Site-Specific Numeric Standards**

The Commission considered the factors set forth in C.R.S. § 25-8-204(4) to establish site-specific standards for the Specified Area.

Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS) are two perfluorinated compounds (PFCs) that have been linked to negative effects on human health. The U.S. Environmental Protection Agency (EPA) states in its May 2016 health advisories that PFOA and PFOS have the following toxicological effects: development effects, liver toxicity, kidney toxicity, immune effects, and cancer. PFCs are highly persistent chemicals that do not readily breakdown in the environment. Unlike many other persistent organic chemicals, PFCs are relatively water soluble and thus highly migratory within an aquifer. The seasonal nature of the contamination is unknown.

Results from the Third Unregulated Contaminant Monitoring Rule (UCMR3), which required testing for six PFCs in large public drinking water systems, found these chemicals in alluvial aquifers in central El Paso County. Based on review of Colorado's UCMR3 data, no other large public drinking water systems in the state were identified as having elevated levels of PFOA/PFOS. As such, the standard being proposed is site-specific, applying only to the area of the state where drinking water sources are known to have been affected by PFOA/PFOS contamination.

The U.S. Air Force has begun an investigatory process at Peterson Air Force Base (AFB), immediately upgradient of the known contamination, to determine possible sources of the PFOA/PFOS. The Air Force has not completed its remedial investigation, which would define the full extent of the contamination stemming from the base. However, the site investigation performed by Peterson AFB showed that PFOA and PFOS contamination originate, at least in part, from firefighting activities at Peterson AFB. The treatment of PFOA and PFOS has yet to begin on Peterson AFB, as a remedy will not be selected until the remedial investigation and feasibility study are conducted. Additionally, other sources of the PFOA/PFOS contamination in the specified area may be identified in the future. This site specific standard will act as the cleanup level for remediation of PFOA and PFOS by identified responsible parties.

The Commission added the sum of PFOA and PFOS = 0.070 micrograms per liter as a site specific standard for this specified area. The standard for the sum of PFOA and PFOS is consistent with the U.S. Environmental Protection Agency Drinking Water Health Advisories of May 2016.

- Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA), United States Environmental Protection Agency, Office of Water, EPA 822-R-16-005, May 2016.
- Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), United States Environmental Protection Agency, Office of Water, EPA 822-R-16-004, May 2016.

This modification also added the Radioactive Materials Standards Table and the organic chemical standards in Table A of the Basic Standards for Ground Water (5 CCR 1002-41) which are assigned to all groundwater.

### **Modification of Specified Area**

In this hearing, the Commission modified the spatial extent of specified area 7 located in central El Paso County in the vicinity of Fountain Creek. This modification of specified area 7 changed the spatial extent as follows:

- The western extent was moved to incorporate all areas contributing groundwater to the greater Widefield-Fountain aquifer area. The boundary integrates a recharge zone in the northwest region, follows a bedrock outcrop that serves as a hydrogeologic barrier along the western edge, and incorporates alluvial outcrops on the west side of the hydrogeologic barrier that flow from west to east, contributing groundwater to the greater aquifer area.
- The northern extent was moved to cover the northernmost recharge zone of these aquifers.
- The eastern boundary was extended to cover the extent of the affected alluvial aquifers and their recharge zones.
- The southern extent was moved to cover all wells that exhibited concentrations of PFCs above the EPA health advisory level of 70 ppt.

As hydrogeologic data has an inherent level of uncertainty, township and range was used to delineate the spatial boundary. Using township and range creates a buffer zone that can account for this uncertainty while also providing a legally-defensible boundary.