

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

#### SUBJECT:

For consideration of the adoption of revisions to the Basic Standards and Methodologies for Surface Water, Regulation #31 (5 CCR 1002-31) to remove the water + fish and fish ingestion standards for certain parameters which were adopted in error in May 2016. Revisions to Regulation #31 proposed by the Water Quality Control 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 <u>double-underlining</u> and proposed deletions are shown with <u>strikeouts</u>. Any alternative proposals related to the subject of this hearing will also be considered.

During the commission's consideration of whether to approve this notice of rulemaking, the commission determined that there is not a likelihood of significant controversy during the rulemaking process. Therefore, the commission has chosen to pursue an alternative rulemaking process consistent with section 24-4-103(4)(a) C.R.S.; and section 21.3(C)(5) of the Procedural Rules. It is the goal of the commission to complete this rulemaking without oral testimony.

#### SCHEDULE OF IMPORTANT DATES

| Proponent's initial comments due | 11/30/2016<br>5 pm     | Additional information below.   |
|----------------------------------|------------------------|---|
| Responsive comments due          | 12/14/2016<br>5 pm     | Additional information below.   |
| Rulemaking Deliberations         | 01/09/2017<br>10:30 am | 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. Sumbittals may be emailed to <a href="mailto:cdphe.wqcc@state.co.us">cdphe.wqcc@state.co.us</a>, 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:

Pursuant to section 21.3(D) of the commission's Procedural Rules, there shall be no party status for this rulemaking proceeding.

#### WRITTEN COMMENTS:

The commission encourages input from interested members of the pubic. Written comments should be emailed to cdphe.wqcc@state.co.us by 12/14/2016.

#### SPECIFIC STATUTORY AUTHORITY:

The provisions of sections 25-8-202(1)(b); 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 16<sup>th</sup> day of September, 2016 at Denver, Colorado.

Trisha Oeth, Administrator

WATER QUALITY CONTROL COMMISSION

### EXHIBIT 1 WATER QUALITY CONTROL DIVISION

# COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL COMMISSION

**REGULATION NO. 31** 

THE BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER (5 CCR 1002-31)

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#### 31.11 BASIC STANDARDS APPLICABLE TO SURFACE WATERS OF THE STATE

All surface waters of the state are subject to the following basic standards; however, discharge of substances regulated by permits which are within those permit limitations shall not be a basis for enforcement proceedings under these basic standards:

...

(3) The interim organic pollutant standards contained in the following Basic Standards for Organic Chemicals Table are applicable to all surface waters of the state for which the corresponding use classifications have been adopted, unless alternative site-specific standards have been adopted pursuant to sub-section (4) below.

Note that all standards in the Basic Standards for Organic Chemicals Table are being adopted as "interim standards." These interim standards will remain in effect until alternative permanent standards are adopted by the Commission in revisions to this regulation or site-specific standards determinations. Although fully effective with respect to current regulatory applications, these interim standards shall not be considered final or permanent standards subject to antibacksliding or downgrading restrictions.

| Parameter                   |            |                           | <u>Human Health Based</u> 1 |                             |       | Aquatic Life Based <sup>4</sup> |  |
|-----------------------------|------------|---------------------------|-----------------------------|-----------------------------|-------|---------------------------------|--|
|                             | CAS No.    | Water Supply <sup>2</sup> | Water+Fish <sup>3</sup>     | Fish Ingestion <sup>8</sup> | Acute | Chronic                         |  |
| Acenaphthene                | 83-32-9    | 420                       | 420                         | 10                          | 1,700 | 520                             |  |
| Acetochlor                  | 34256-82-1 | 140                       |                             |                             |       |                                 |  |
| Acetone                     | 67-64-1    | 6300                      |                             |                             |       |                                 |  |
| Acrolein                    | 107-02-8   | 3.5                       | 3.5                         | 9.3                         | 68    | 21                              |  |
| Acrylamide <sup>C, 13</sup> | 79-06-1    | 0.022                     |                             |                             |       |                                 |  |
| Acrylonitrile <sup>C</sup>  | 107-13-1   | 0.065                     | 0.051                       | 0.25                        | 7,500 | 2,600                           |  |
| Alachlor                    | 15972-60-8 | 2 <sup>M</sup>            | 2                           | 140                         |       |                                 |  |
| Aldicarb                    | 116-06-3   | 7 <sup>M</sup>            |                             |                             |       |                                 |  |
| Aldicarb Sulfone            | 1646-88-4  | 7 <sup>M</sup>            |                             |                             |       |                                 |  |
| Aldicarb Sulfoxide          | 1646-87-3  | 7 <sup>M</sup>            |                             |                             |       |                                 |  |
| Aldrin <sup>C</sup>         | 309-00-2   | 0.0021                    | 4.9X10 <sup>-5</sup>        | 5.0X10 <sup>-5</sup>        | 1.5   |                                 |  |
| Aniline <sup>C</sup>        | 62-53-3    | 6.1                       |                             |                             |       |                                 |  |
| Anthracene (PAH)            | 120-12-7   | 2,100                     | 2,100                       | 40,000                      |       |                                 |  |
| Aramite <sup>C</sup>        | 140-57-8   | 1.4                       |                             |                             |       |                                 |  |
| Atrazine                    | 1912-24-9  | 3 <sup>M</sup>            |                             |                             |       |                                 |  |
| Azobenzene <sup>C</sup>     | 103-33-3   | 0.32                      |                             |                             |       |                                 |  |
| Benzene <sup>C, 12</sup>    | 71-43-2    | 2.3 to 5 <sup>M</sup>     | 2.2                         | 51                          | 5,300 |                                 |  |

| Parameter                                  |            |                               | Human Health Bas        | sed <sup>1</sup>            | Aquatic Life Based <sup>4</sup> |         |
|--|------------|-------------------------------|-------------------------|-----------------------------|---------------------------------|---------|
|  | CAS No.    | Water Supply <sup>2</sup>     | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute                           | Chronic |
| Benzidine <sup>C</sup>                     | 92-87-5    | 0.00015                       | 8.6X10 <sup>-5</sup>    | 0.00020                     | 2,500                           |         |
| Benzo(a)anthracene (PAH) <sup>C</sup>      | 56-55-3    | 0.0048                        | 0.0038                  | 0.018                       |                                 |         |
| Benzo(a)pyrene (PAH) <sup>C, 12</sup>      | 50-32-8    | 0.0048 to<br>0.2 <sup>M</sup> | 0.0038                  | 0.018                       |                                 |         |
| Benzo(b)fluoranthene (PAH) <sup>C</sup>    | 205-99-2   | 0.0048                        | 0.0038                  | 0.018                       |                                 |         |
| Benzo(k)fluoranthene (PAH) <sup>C</sup>    | 207-08-9   | 0.0048                        | 0.0038                  | 0.018                       |                                 |         |
| Benzo(g,h,i)perylene (PAH)                 | 191-24-2   |                               | 0.0038                  | 0.018                       |                                 |         |
| Benzotrichloride <sup>C</sup>              | 98-07-7    | 0.0027                        |                         |                             |                                 |         |
| Benzyl chloride <sup>C</sup>               | 100-44-7   | 0.21                          |                         |                             |                                 |         |
| Biphenyl <sup>C</sup>                      | 92-52-4    | 4.4                           | <del>3.5</del>          | <del>16.3</del>             |                                 |         |
| Bis(chloromethyl)ether (BCME) <sup>C</sup> | 542-88-1   | 0.00016                       | 0.0001                  | 0.0003                      |                                 |         |
| Bromate <sup>C</sup>                       | 15541-45-4 | 0.050                         |                         |                             |                                 |         |
| Bromobenzene                               | 108-86-1   | 56                            |                         |                             |                                 |         |
| Bromodichloromethane (HM) <sup>C</sup>     | 75-27-4    |                               | 0.55                    | 17                          | 11,000                          |         |
| Bromoform (HM) <sup>C</sup>                | 75-25-2    |                               | 4.3                     | 140                         |                                 |         |
| Butyl benzyl phthalate                     | 85-68-7    | 1,400                         | 1,400                   | 1,900                       |                                 |         |
| Carbofuran <sup>C, 12</sup>                | 1563-66-2  | 35 to<br>40 <sup>M</sup>      |                         |                             |                                 |         |
| Carbon tetrachloride <sup>C, 12</sup>      | 56-23-5    | 0.5 to 5 <sup>M</sup>         | 0.43                    | 3.0                         | 35,200                          |         |

| Parameter                               |           |                           | Human Health Bas        | sed <sup>1</sup>            | Aquatic I | <u>_ife Based</u> <sup>4</sup> |
|---|-----------|---------------------------|-------------------------|-----------------------------|-----------|--------------------------------|
|   | CAS No.   | Water Supply <sup>2</sup> | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute     | Chronic                        |
| Chlordane <sup>C, 12</sup>              | 57-74-9   | 0.10 to 2 <sup>M</sup>    | 0.00080                 | 0.00081                     | 1.2       | 0.0043                         |
| Chlordecone <sup>C</sup>                | 143-50-0  | 0.0035                    |                         |                             |           |                                |
| Chlorethyl ether (BIS-2) <sup>C</sup>   | 111-44-4  | 0.032                     | 0.030                   | 0.53                        |           |                                |
| Chlorobenzene <sup>11</sup>             | 108-90-7  | 100 <sup>M</sup>          | 100                     | 1,600                       |           |                                |
| Chlorodibromomethane (HM) <sup>11</sup> | 124-48-1  |                           | 54.0                    | 1,700                       |           |                                |
| Chloroform (HM) <sup>C</sup>            | 67-66-3   |                           | 3.4                     | 110                         | 28,900    | 1,240                          |
| Chloroisopropyl ether(BIS-2)            | 108-60-1  | 280                       | 280                     | 65,000                      |           |                                |
| 4-Chloro-3-methylphenol                 | 59-50-7   | 210                       |                         |                             | 30        |                                |
| Chloronapthalene                        | 91-58-7   | 560                       | 560                     | 10                          | 2,300     | 620                            |
| Chlorophenol,2-                         | 95-57-8   | 35                        | 35                      | 150                         | 4,380     | 2,000                          |
| Chlorphrifos                            | 2921-88-2 | 21                        |                         |                             | 0.083     | 0.041                          |
| Chrysene (PAH) <sup>C</sup>             | 218-01-9  | 0.0048                    | 0.0038                  | 0.018                       |           |                                |
| DDD <sup>c</sup>                        | 72-54-8   | 0.15                      | 0.00031                 | 0.00031                     | 0.6       |                                |
| DDE <sup>C</sup>                        | 72-55-9   | 0.1                       | 0.00022                 | 0.00022                     | 1,050     |                                |
| DDT <sup>C</sup>                        | 50-29-3   | 0.1                       | 0.00022                 | 0.00022                     | 0.55      | 0.001                          |
| Dalapon                                 | 75-99-0   | 200 <sup>M</sup>          |                         |                             |           |                                |
| Demeton                                 | 8065-48-3 |                           |                         |                             |           | 0.1                            |
| Diazinon                                | 333-41-5  |                           |                         |                             | 0.17      | 0.17                           |

| Parameter                                 |           |                           | Human Health Bas        | sed <sup>1</sup>            | Aquatic L | ife Based <sup>4</sup> |
|---|-----------|---------------------------|-------------------------|-----------------------------|-----------|------------------------|
|   | CAS No.   | Water Supply <sup>2</sup> | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute     | Chronic                |
| Dibenzo(a,h)anthracene (PAH) <sup>C</sup> | 53-70-3   | 0.0048                    | 0.0038                  | 0.018                       |           |                        |
| 1,2 Dibromo-3-Chloropropane (DBCP) C      | 96-12-8   | 0.2 <sup>M</sup>          |                         |                             |           |                        |
| Dibromoethane 1,2 <sup>C, 13</sup>        | 106-93-4  | 0.018                     |                         |                             |           |                        |
| Dicamba                                   | 1918-00-9 | 210                       | 170                     | 860                         |           |                        |
| Dichloroacetic acid <sup>C</sup>          | 79-43-6   | 0.7                       |                         |                             |           |                        |
| Dichlorobenzene 1,2 <sup>11</sup>         | 95-50-1   | 600 <sup>M</sup>          | 420                     | 1,300                       |           |                        |
| Dichlorobenzene 1,3                       | 541-73-1  | 94                        | 94                      | 960                         |           |                        |
| Dichlorobenzene 1,4 <sup>11</sup>         | 106-46-7  | 75 <sup>M</sup>           | 63                      | 190                         |           |                        |
| Dichlorobenzidine <sup>C</sup>            | 91-94-1   | 0.078                     | 0.021                   | 0.028                       |           |                        |
| Dichloroethane 1,2 <sup>C, 12</sup>       | 107-06-2  | 0.38 to 5 <sup>M</sup>    | 0.38                    | 37                          | 118,000   | 20,000                 |
| Dichloroethylene 1,1                      | 75-35-4   | 7 <sup>M</sup>            | 7                       | 3,600                       |           |                        |
| Dichloroethylene 1,2-cis                  | 156-59-2  | 14 to 70 <sup>M</sup>     |                         |                             |           |                        |
| Dichloroethylene 1,2-trans <sup>11</sup>  | 156-60-5  | 100 <sup>M</sup>          | 100                     | 10,000                      |           |                        |
| Dichloromethane (methylene chloride) C,   | 75-09-2   | 5 <sup>M</sup>            | 4.6                     | 590                         |           |                        |
| Dichlorophenol 2,4                        | 120-83-2  | 21                        | 21                      | 290                         | 2,020     | 365                    |
| Dichlorophenoxyacetic acid (2,4-D)        | 94-75-7   | 70 <sup>M</sup>           |                         |                             |           |                        |
| Dichloropropane 1,2 <sup>C, 12</sup>      | 78-87-5   | 0.52 to 5 <sup>M</sup>    | 0.50                    | 14                          | 23,000    | 5,700                  |

| Parameter                              |           |  | Human Health Ba         | sed <sup>1</sup>            | Aquatic Life Based <sup>4</sup> |         |
|--|-----------|--|-------------------------|-----------------------------|---------------------------------|---------|
|  | CAS No.   | Water Supply <sup>2</sup>                          | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute                           | Chronic |
| Dichloropropylene 1,3 <sup>C</sup>     | 542-75-6  | 0.35   | 0.34                    | 21                          | 6,060                           | 244     |
| Dichlorvos <sup>C</sup>                | 62-73-7   | 0.12   |                         |                             |                                 |         |
| Dieldrin <sup>C</sup>                  | 60-57-1   | 0.002  | 5.2X10 <sup>-5</sup>    | 5.4X10 <sup>-5</sup>        | 0.24                            | 0.056   |
| Diethyl phthalate                      | 84-66-2   | 5,600  | 5,600                   | 44,000                      |                                 |         |
| Diisopropylmethylphosphonate (DIMP)    | 1445-75-6 | 8  |                         |                             |                                 |         |
| Dimethylphenol 2,4                     | 105-67-9  | 140  | 140                     | 850                         | 2,120                           |         |
| Dimethyl phthalate                     | 131-11-3  | 70,000   | 70,000                  | 1,100,000                   |                                 |         |
| Di-n-butyl phthalate                   | 84-74-2   | 700  | 700                     | 4,500                       |                                 |         |
| Dinitrophenol 2,4                      | 51-28-5   | 14   | 14                      | 5,300                       |                                 |         |
| Dinitro-o-cresol 4,6                   | 534-52-1  | 0.27   | 1.3                     | 28                          |                                 |         |
| Dinitrotoluene 2,4 <sup>C</sup>        | 121-14-2  | 0.11   | 0.11                    | 3.4                         |                                 |         |
| Dinitrotoluene 2,6 <sup>C</sup>        | 606-20-2  |  |                         |                             | 330                             | 230     |
| Dinoseb                                | 88-85-7   | 7 <sup>M</sup>                                     |                         |                             |                                 |         |
| Dioxane 1,4-                           | 123-91-1  | 0.35   |                         |                             |                                 |         |
| Dioxin (2,3,7,8 TCDD) <sup>C, 12</sup> | 1746-01-6 | 2.2x10 <sup>-7</sup><br>to 3.0x10 <sup>-5, M</sup> | 5.0X10 <sup>-9</sup>    | 5.1X10 <sup>-9</sup>        | 0.01                            | 0.00001 |
| Diphenylhydrazine 1,2 <sup>C</sup>     | 122-66-7  | 0.044  | 0.036                   | 0.20                        | 270                             |         |
| Di(2-ethylhexyl)adipate                | 103-23-1  | 400 <sup>M</sup>                                   |                         |                             |                                 |         |
| Diquat <sup>12</sup>                   | 85-00-7   | 15 to 20 <sup>M</sup>                              |                         |                             |                                 |         |

| Parameter   |            |                              | Human Health Base       | ed <sup>1</sup>             | Aquatic Life Based <sup>4</sup> |         |  |
|---|------------|------------------------------|-------------------------|-----------------------------|---------------------------------|---------|--|
|   | CAS No.    | Water Supply <sup>2</sup>    | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute                           | Chronic |  |
| Endosulfan  | 115-29-7   | 42                           | 10                      |                             | 0.11                            | 0.056   |  |
| Endosulfan, alpha   | 959-98-8   | 42                           | 10                      |                             | 0.11                            | 0.056   |  |
| Endosulfan, beta  | 33213-65-9 | 42                           | <sup>10</sup>           |                             | 0.11                            | 0.056   |  |
| Endosulfan sulfate  | 1031-07-8  | 42                           | <sup>10</sup>           |                             | 0.11                            | 0.056   |  |
| Endothall   | 145-73-3   | 100 <sup>M</sup>             |                         |                             |                                 |         |  |
| Endrin  | 72-20-8    | 2 <sup>M</sup>               | 10                      |                             | 0.086                           | 0.036   |  |
| Endrin aldehyde   | 7421-93-4  | 2.1                          | 0.29                    | 0.30                        |                                 |         |  |
| Epichlorohydrin <sup>C</sup>                              | 106-89-8   | 3.5                          |                         |                             |                                 |         |  |
| Ethylbenzene <sup>11</sup>                                | 100-41-4   | 700 <sup>M</sup>             | 530                     | 2,100                       | 32,000                          |         |  |
| Ethylene dibromide <sup>C, 12</sup> (1,2 – dibromoethane) | 106-93-4   | 0.02 to<br>0.05 <sup>M</sup> |                         |                             |                                 |         |  |
| Ethylene glycol monobutyl ether (EGBE) (2-Butoxyethanol)  | 111-76-2   | 700                          |                         |                             |                                 |         |  |
| Ethylhexyl phthalate (BIS-2) <sup>C, 12</sup> (DEHP)      | 117-81-7   | 2.5 to 6 <sup>M</sup>        | 1.2                     | 2.2                         |                                 |         |  |
| Fluoranthene (PAH)  | 206-44-0   | 280                          | 130                     | 140                         | 3,980                           |         |  |
| Fluorene (PAH)  | 86-73-7    | 280                          | 280                     | 5,300                       |                                 |         |  |
| Folpet <sup>C</sup>                                       | 133-07-3   | 10                           |                         |                             |                                 |         |  |
| Furmecyclox <sup>C</sup>                                  | 60568-05-0 | 1.2                          |                         |                             |                                 |         |  |
| Glyphosate  | 1071-83-6  | 700 <sup>M</sup>             |                         |                             |                                 |         |  |

| Parameter  |            |                              | <u>Human Health Based</u> 1 |                             |       | Aquatic Life Based <sup>4</sup> |  |
|--|------------|------------------------------|-----------------------------|-----------------------------|-------|---------------------------------|--|
|  | CAS No.    | Water Supply <sup>2</sup>    | Water+Fish <sup>3</sup>     | Fish Ingestion <sup>8</sup> | Acute | Chronic                         |  |
| Guthion  | 86-50-0    |                              |                             |                             |       | 0.01                            |  |
| Heptachlor <sup>C, 12</sup>                                | 76-44-8    | 0.008 to<br>0.4 <sup>M</sup> | 7.8X10 <sup>-5</sup>        | 7.9X10 <sup>-5</sup>        | 0.52  | 0.0038                          |  |
| Heptachlor epoxide <sup>C, 12</sup>                        | 1024-57-3  | 0.004 to<br>0.2 <sup>M</sup> | 3.9X10 <sup>-5</sup>        | 3.9X10 <sup>-5</sup>        | 0.52  | 0.0038                          |  |
| Hexachlorobenzene <sup>C, 12</sup>                         | 118-74-1   | 0.022 to<br>1.0 <sup>M</sup> | 0.00028                     | 0.00029                     |       |                                 |  |
| Hexachlorobutadiene  | 87-68-3    | 0.45                         | 0.44                        | 10                          | 90    | 9.3                             |  |
| Hexachlorocyclohexane,<br>Alpha <sup>C</sup>               | 319-84-6   | 0.0056                       | 0.0026                      | 0.0049                      |       |                                 |  |
| Hexachlorocyclohexane,<br>Beta                             | 319-85-7   | 0.019                        | 0.0091                      | 0.017                       |       |                                 |  |
| Hexachlorocyclohexane, Gamma<br>(Lindane)                  | 58-89-9    | 0.2 <sup>M</sup>             | 0.2                         | 10                          | 0.95  | 0.08                            |  |
| Hexachlorocyclohexane, Technical <sup>C</sup>              | 608-73-1   |                              | 0.012                       | 0.041                       | 100   |                                 |  |
| Hexachlorocyclopentadiene <sup>11, 12</sup><br>(HCCPD)     | 77-47-4    | 42 to 50 <sup>M</sup>        | 40                          | <sup>10</sup>               | 7     | 5                               |  |
| Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-hcdd) <sup>C</sup> | 19408-74-3 | 5.60E-06                     |                             |                             |       |                                 |  |
| Hexachloroethane   | 67-72-1    | 0.88                         | 0.5                         | 1.2                         | 980   | 540                             |  |
| Hexanone 2-  | 591-78-6   | 35                           |                             |                             |       |                                 |  |
| Hydrazine/Hydrazine sulfate <sup>C</sup>                   | 302-01-2   | 0.012                        |                             |                             |       |                                 |  |
| Indeno(1,2,3-cd)pyrene (PAH) <sup>C</sup>                  | 193-39-5   | 0.0048                       | 0.0038                      | 0.018                       |       |                                 |  |
| Isophorone <sup>11</sup>                                   | 78-59-1    | 140                          | 130                         | 3,600                       |       |                                 |  |

| Parameter   |                      |                           | Human Health Bas        | sed <sup>1</sup>             | Aquatic Life Based <sup>4</sup> |         |
|---|----------------------|---------------------------|-------------------------|------------------------------|---------------------------------|---------|
|   | CAS No.              | Water Supply <sup>2</sup> | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup>  | Acute                           | Chronic |
| Malathion   | 121-75-5             | 140                       |                         |                              |                                 | 0.1     |
| Methanol  | <mark>67-56-1</mark> | 14,000                    | <del>69,400</del>       | <del>261,000</del> - <u></u> |                                 |         |
| Methoxychlor <sup>12</sup>                            | 72-43-5              | 35 to<br>40 <sup>M</sup>  | 10                      |                              |                                 | 0.03    |
| Methyl bromide (HM)                                   | 74-83-9              |                           | 9.8                     | 1,500                        |                                 |         |
| Methyl chloride (HM) <sup>C</sup>                     | 74-87-3              |                           | 5.6                     | 180                          |                                 |         |
| 4,4-Methylene bis (N,N'-dimethyl)aniline <sup>C</sup> | 101-61-1             | 0.76                      |                         |                              |                                 |         |
| Metribuzin  | 21087-64-9           | 180                       | 160                     | 1,700                        |                                 |         |
| Mirex   | 2385-85-5            | 1.4                       |                         |                              |                                 | 0.001   |
| Naphthalene (PAH)                                     | 91-20-3              | 140                       | 140                     | 10                           | 2,300                           | 620     |
| Nitrobenzene  | 98-95-3              | 14                        | 14                      | 2,800                        | 27,000                          |         |
| Nitrophenol 4   | 100-02-7             | 56                        | 56                      | 9,700                        |                                 |         |
| Nitrosodibutylamine N <sup>C</sup>                    | 924-16-3             | 0.0065                    | 0.0043                  | 0.012                        |                                 |         |
| Nitrosodiethylamine N <sup>C</sup>                    | 55-18-5              | 0.00023                   | 0.00023                 | 0.0083                       |                                 |         |
| Nitrosodimethylamine N <sup>C</sup>                   | 62-75-9              | 0.00069                   | 0.00069                 | 3.0                          |                                 |         |
| N-Nitrosodiethanolamine <sup>C</sup>                  | 1116-54-7            | 0.013                     |                         |                              |                                 |         |
| Nitrosodiphenylamine N <sup>C</sup>                   | 86-30-6              | 7.1                       | 3.3                     | 6.0                          |                                 |         |
| N-Nitroso-N-methylethylamine <sup>C</sup>             | 10595-95-6           | 0.0016                    |                         |                              |                                 |         |
| Nitrosopyrrolidine N <sup>C</sup>                     | 930-55-2             | 0.017                     | 0.016                   | 36                           |                                 |         |

| Parameter                              |                              |                               | Human Health Based <sup>1</sup> |                             |                               | Aquatic Life Based <sup>4</sup> |  |
|--|------------------------------|-------------------------------|---------------------------------|-----------------------------|-------------------------------|---------------------------------|--|
|  | CAS No.                      | Water Supply <sup>2</sup>     | Water+Fish <sup>3</sup>         | Fish Ingestion <sup>8</sup> | Acute                         | Chronic                         |  |
| N-Nitrosodi-n-propylamine <sup>C</sup> | 621-64-7                     | 0.005                         | 0.005                           | 0.50                        |                               |                                 |  |
| Nonylphenol                            | 84852-15-3 and<br>25154-52-3 |                               |                                 |                             | 28<br>(effective<br>1/1/2011) | 6.6<br>(effective<br>1/1/2011)  |  |
| Oxamyl (vydate) <sup>12</sup>          | 23135-22-0                   | 175 to<br>200 <sup>M</sup>    |                                 |                             |                               |                                 |  |
| PCBs <sup>C, 9, 12</sup>               | 1336-36-3                    | 0.0175 to<br>0.5 <sup>M</sup> | 6.4X10 <sup>-5</sup>            | 6.4X10 <sup>-5</sup>        | 2.0                           | 0.014                           |  |
| Parathion                              | 56-38-2                      |                               |                                 |                             | 0.065                         | 0.013                           |  |
| Pentachlorobenzene                     | 608-93-5                     | 5.6                           | 1.4                             | 1.5                         |                               |                                 |  |
| Pentachlorophenol <sup>C, 12</sup>     | 87-86-5                      | 0.088 to<br>1.0 <sup>M</sup>  | 0.080                           | 0.91                        | 19 <sup>6</sup>               | 15 <sup>6</sup>                 |  |
| Perchlorate                            | 7790-98-9                    | 4.9                           |                                 |                             |                               |                                 |  |
| Phenol                                 | 108-95-2                     | 2,100                         | 2,100                           | 10                          | 10,200                        | 2,560                           |  |
| Picloram                               | 1918-02-1                    | 490                           |                                 |                             |                               |                                 |  |
| Prometon                               | 1610-18-0                    | 100                           |                                 |                             |                               |                                 |  |
| Propylene oxide <sup>C</sup>           | 75-56-9                      | 0.15                          |                                 |                             |                               |                                 |  |
| Pyrene (PAH)                           | 129-00-0                     | 210                           | 210                             | 4,000                       |                               |                                 |  |
| Quinoline <sup>C</sup>                 | 91-22-5                      | 0.012                         |                                 |                             |                               |                                 |  |
| Simazine                               | 122-34-9                     | 4 <sup>M</sup>                |                                 |                             |                               |                                 |  |
| Styrene                                | 100-42-5                     | 100 <sup>M</sup>              |                                 |                             |                               |                                 |  |
| Tetrachlorobenzene 1,2,4,5-            | 95-94-3                      | 2.1                           | 0.97                            | 1.07                        |                               |                                 |  |

| Parameter  |                      |                           | Human Health Bas        | sed <sup>1</sup>            | Aquatic Life Based <sup>4</sup> |                     |
|--|----------------------|---------------------------|-------------------------|-----------------------------|---------------------------------|---------------------|
|  | CAS No.              | Water Supply <sup>2</sup> | Water+Fish <sup>3</sup> | Fish Ingestion <sup>8</sup> | Acute                           | Chronic             |
| Tetrachloroethane 1,1,2,2 <sup>C</sup>                 | 79-34-5              | 0.18                      | 0.17                    | 4                           |                                 | 2,400               |
| Tetrachloroethylene<br>(PCE) <sup>c</sup>              | 127-18-4             | 5 <sup>M</sup>            | 5                       | 62                          | 5,280                           | 840                 |
| Tetrahydrofuran  | 109-99-9             | 6,300                     | <del>31,200</del>       | <del>118,000</del>          |                                 |                     |
| Toluene <sup>11, 12</sup>                              | 108-88-3             | 560 to1,000 <sup>M</sup>  | 510                     | 5,900                       | 17,500                          |                     |
| Toxaphene <sup>C, 12</sup>                             | 8001-35-2            | 0.032 to 3 <sup>M</sup>   | 0.00028                 | 10                          | 0.73                            | 0.0002              |
| Tributyltin (TBT)                                      | 56573-85-4           |                           |                         |                             | 0.46                            | 0.072               |
| Tricholoacetic acid                                    | 76-03-9              | 0.52                      |                         |                             |                                 |                     |
| Trichlorobenzene 1,2,4-11                              | 120-82-1             | 70 <sup>M</sup>           | 35                      | 10                          | 250                             | 50                  |
| Trichloroethane 1,1,1<br>(1,1,1-TCA)                   | 71-55-6              | 200 <sup>M</sup>          |                         |                             |                                 |                     |
| Trichloroethane 1,1,2<br>(1,1,2-TCA) <sup>11, 12</sup> | 79-00-5              | 2.8<br>to 5 <sup>M</sup>  | 2.7                     | 71                          | 9,400                           |                     |
| Trichloroethylene (TCE) <sup>C</sup>                   | <del>79-01-6</del>   | 0.76 to 5 <sup>M</sup>    | <u>2.5</u> 0.6          | <u>30-2.8</u>               | 45,000                          | <mark>21,900</mark> |
| Trichloropropane 1,2,3- C, 13                          | 96-18-4              | 3.7E-4                    |                         |                             |                                 |                     |
| Trichlorophenol 2,4,5                                  | 95-95-4              | 700                       | 700                     | 3,600                       |                                 |                     |
| Trichlorophenol 2,4,6 <sup>C</sup>                     | 88-06-2              | 3.2                       | 1.4                     | 2.4                         |                                 | 970                 |
| Trichlorophenoxypropionic acid (2,4,5-tp) (Silvex)     | 93-72-1              | 50 <sup>M</sup>           |                         |                             |                                 |                     |
| Trihalomethanes  | (total) <sup>7</sup> | 80                        | 80                      |                             |                                 |                     |

| BASIC STANDARDS FOR ORGANIC CHEMICALS (in micrograms per liter) |           |   |       |     |  |  |  |  |
|---|-----------|---|-------|-----|--|--|--|--|
| Parameter   |           | Human Health Based <sup>1</sup> Aquatic Life Based <sup>4</sup>                             |       |     |  |  |  |  |
|   | CAS No.   | Water Supply <sup>2</sup> Water+Fish <sup>3</sup> Fish Ingestion <sup>8</sup> Acute Chronic |       |     |  |  |  |  |
| Vinyl Chloride <sup>C, 12</sup>                                 | 75-01-4   | 0.023 to 2 <sup>M</sup>   | 0.023 | 2.3 |  |  |  |  |
| Xylenes (total) <sup>12</sup>                                   | 1330-20-7 | 1,400 to 10,000 <sup>M</sup>  |       |     |  |  |  |  |

- 1 All standards are chronic or 30-day standards. They are based on information contained in EPA's Integrated Risk Information System (IRIS) and/or EPA lifetime health advisories for drinking water using a 10<sup>-6</sup> incremental risk factor unless otherwise noted.
- Only applicable to segments classified for water supply.
- Applicable to all Class 1 aquatic life segments which also have a water supply classification or Class 2 aquatic life segments which also have a water supply classification designated by the Commission after rulemaking hearing. These class 2 segments will generally be those where fish of a catchable size and which are normally consumed are present, and where there is evidence that fishing takes place on a recurring basis. The Commission may also consider additional evidence that may be relevant to a determination whether the conditions applicable to a particular segment are similar enough to the assumptions underlying the water plus fish ingestion criteria to warrant the adoption of water plus fish ingestion standards for the segment in question.
- 4 Applicable to all aquatic life segments.
- 5 PQL's for the constituents listed above can be found at section 61.8((2)(I) of the Regulations for the State Discharge Permit System.
- 6 Standards are pH dependent. Those listed are calculated for pH = 7.8.

Acute = 
$$e^{[1.005(pH)-4.869]}$$
; Chronic =  $e^{[1.005(pH)-5.134]}$ .

- 7 Total trihalomethanes are considered the sum of the concentrations of bromodichloromethane (CAS No. 75-27-4), dibromochloromethane (Chlorodibromomethane(HM), CAS No. 124-48-1), tribromomethane (bromoform, CAS No. 75-25-2) and trichloromethane (chloroform, CAS No. 67-66-3).
- Applicable to the following segments which do not have a water supply classification: all Class 1 aquatic life segments or Class 2 aquatic life segments designated by the Commission after rulemaking hearing. These class 2 segments will generally be those where fish of a catchable size and which are normally consumed are present, and where there is evidence that fishing takes place on a recurring basis. The Commission may also consider additional evidence that may be relevant to a determination whether the conditions applicable to a particular segment are similar enough to the assumptions underlying the fish ingestion criteria to warrant the adoption of fish ingestion standards for the segment in question.
- PCBs are a class of chemicals which include aroclors, 1242, 1254, 1221, 1232, 1248,1260 and 1016, CAS numbers 53469-21-9, 11097-69-1, 11104-28-2, 11141-16-5, 12672-29-6, 11096-82-5, and 12674-11-2 respectively. The aquatic life criteria apply to this set of PCBs. The human health criteria apply to total PCBs, i.e. the sum of all congenor or all isomer analyses.
- The chronic aquatic life standard is more stringent than the associated Water+Fish or Fish Ingestion standard, and therefore no Water+Fish or Fish Ingestion standard has been adopted.
- 11 The Water+Fish and Fish Ingestions standards for these compounds have been calculated using a relative source contribution (RSC).
- Whenever a range of standards is listed and referenced to this footnote, the first number in the range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.
- Mutagenic compound, age dependent factors were used in calculating standard.
- C Carcinogens classified by the EPA as A, B1, or B2.
- M Drinking water MCL.

CAS No. - Chemical Abstracts Service Registry Number.

(HM) - Halomethanes

(PAH) - Polynuclear Aromatic Hydrocarbons.

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#### 31.54 <u>STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE;</u> JANUARY 9, 2017 RULEMAKING; EFFECTIVE MARCH 1, 2017

The provisions of sections 25-8-202(1)(b), 25-8-204; and 25-8-402, C.R.S., provide the specific statutory authority for adoption. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

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

#### A. Corrections to Organic Chemicals

In this written comment rulemaking, the Commission corrected errors to the organic chemical standards in the regulation that occurred subsequent to the April 11, 2016 rulemaking. The errors were to revisions or additions of water+fish and fish ingestion standards for biphenyl, tetrahydrofuran, methanol and trichloroethylene (TCE), and a revision to the trichloroethylene (TCE) water supply standard. During the hearing process for the April 11, 2016 rulemaking, the division withdrew the afore mentioned additions and revisions to the Regulation 31 organic chemical standards due to concerns related to EPA's 2015 update to Human Health Ambient Water Quality Criteria. The corrections made by the commission in this rulemaking were: Deletion of the water+fish and fish ingestion standards for biphenyl, tetrahydrofuran and methanol; And, reversion of the water+fish, fish ingestion and water supply standards for trichloroethylene (TCE) to the standards in effect prior to the April 11, 2016 rulemaking.