

STATE OF COLORADO

John W. Hickenlooper, Governor
Christopher E. Urbina, MD, MPH
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

May 23, 2011

PWSID# CO-0138025
Town of Merino
206 Colorado Avenue
Merino, CO 80741

Certified Mail #7006 2760 0003 4263 9380

RE: Service of Amendment to Enforcement Order Number: DC-090116-3

Dear Town of Merino:

The Town of Merino is hereby issued the enclosed amendment to the Enforcement Order Number: DC-090116-3 that was issued to the Town of Merino on January 16, 2009. This order amendment is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §25-1.5-203 of the Colorado Revised Statutes.

The terms of the enclosed amendment to Enforcement Order Number DC-090116-3 are those that were discussed in the May 19, 2011 meeting between the Town of Merino and the Division. The changes in schedule as put forth in this amendment were discussed with the Town of Merino in the meeting and are considered to be achievable and fair. Should the Town of Merino fail to meet the deadlines for action as put forth in this amendment, the Division may pursue an action for penalties, as stipulated in the original Enforcement Order.

Should you desire to discuss this matter with the Division or if you have any questions regarding the order amendment(s), please don't hesitate to contact Ms. Margaret Talbott of this office at (303) 692-3540 or by electronic mail at margaret.talbott@state.co.us.

Sincerely,

Margaret E. Talbott, P.E.
Drinking Water Enforcement Supervisor
Compliance Assurance Section
WATER QUALITY CONTROL DIVISION

ec: Heather Drissel, ES CDPHE
Dennis Pontius, ES CDPHE
Jon Erickson, ES, CDPHE
Rick Koplitz, CAS, CDPHE
Lori Gerzina, CAS, CDPHE
Michael Beck, FS, CDPHE
Garie County, Merino
Boyd Hanzon, P.E., Rocky Mountain Water Solutions

cc: File DW Enf CO-01380250, Merino Town of



**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION**

**AMENDMENT TO ENFORCEMENT ORDER NUMBER: DC-090116-3
NUMBER ONE**

**IN THE MATTER OF: TOWN OF MERINO
PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO-0138025
LOGAN COUNTY, COLORADO**

Pursuant to the authority vested in the Colorado Department of Public Health and Environment (the "Department") by §25-1-109 and §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."), which authority is implemented through the Department's Water Quality Control Division ("Division"), the Division hereby makes the following findings and issues the following Enforcement Order Amendment:

GENERAL FINDINGS

1. On January 16, 2009, the Division issued Enforcement Order Number: DC-090116-3 to the Town of Merino citing violations of the Colorado Primary Drinking Water Regulations for failure to comply with the maximum contaminant level(s) for uranium. The Enforcement Order is attached hereto as Exhibit A and is incorporated herein by reference.
2. After re-evaluating the difficulties associated with complying with the radionuclide maximum contaminant levels and in coordination with the Division's CORADS initiative, the Division is amending Enforcement Order number DC-090116-3 as follows:

AMENDMENT NUMBER ONE

3. Effective as of the issued date of this Amendment, Enforcement Order Number: DC-090116-3 is therefore amended to revise the Enforcement Order as follows:
 - A. The compliance schedule specified in paragraph 15 is superseded and replaced with the following new paragraph 3(A)(i):
 - i. In order to ensure long-term compliance with the maximum contaminant levels for radionuclides, specifically including uranium, the Town of Merino shall evaluate

and upgrade, as needed, the System's water sources and/or treatment process(es) in accordance with the following schedule:

- a. By April 30, 2009, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) or verify that a qualified Professional Engineer has already been retained to evaluate and recommend radiological treatment technologies or alternate water sources to the Town of Merino to ensure compliance with the maximum contaminant level for radionuclides, specifically including uranium.
- b. By September 1, 2011, submit for Department review and comment a finalized Preliminary Engineering Report for system improvements to comply with the maximum contaminant levels for radionuclides, specifically including uranium.
- c. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- d. The Preliminary Engineering Report submittal package must be developed consistent with the Colorado Drinking Water Preliminary Engineering Report Guidance & Review Checklist Form. (see http://www.cdphe.state.co.us/wq/opa/pdf/19_CPERGuideChecklistDW.pdf)
- e. The Preliminary Engineering Report must clearly identify the specific treatment technology the Town of Merino will use to ensure compliance with the maximum contaminant levels for radionuclides, specifically including uranium.
- f. The Preliminary Engineering Report must include a process flow schematic of the distribution system from wellheads to points of use, including flow rates, treatment facilities, storage tanks and all service connections supplied by the wells. Alternative treatment locations for the selected treatment process or processes must be evaluated with a recommended location selection. The process flow schematic information and evaluation must be included to ensure all water from the System is treated.
- g. The Preliminary Engineering Report must include a proposal for management of residuals from the treatment technology selected.
- h. The Preliminary Engineering Report submittal package must include design calculations showing the proposed treatment system is properly sized and chlorine contact times can be met for expected flow rates.

{Please note that, prior to construction, the Department must give final

approval to any modifications to the System's water source or treatment process. The Department will not perform a detailed review and final approval of any proposed modifications until the final design plans and specifications have been received pursuant to paragraph 3(B)(i)(i) below.

- i. By June 15, 2012, submit Final Design Plans and Specifications for the System improvements for Department review and approval in accordance with the State of Colorado Design Criteria for Potable Water Systems.
 - j. The Final Design Plans and Specifications submittal package must include specifications for treatment equipment and/or chemical additives that come in contact with the water that indicate ANSI standards 60 and 61 are met (NSF certification).
 - k. By December 15, 2013, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels for radionuclides, specifically including uranium.
 - l. By December 31, 2013, submit the Professional Engineer's Certification that the System improvements to comply with the maximum contaminant levels for radionuclides, specifically including uranium were constructed/installed as approved by the Department.
- B. The following new paragraphs are incorporated into Enforcement Order Number DC-090116-3
- i. All documents submitted under this Order Amendment shall use the same titles as stated in the Order Amendment, and shall reference both the number of the Order and the number of the Order Amendment paragraph pursuant to which the document is required.
- C. For all documents, plans, records, reports, and replies required to be submitted by the Order, the Town of Merino shall submit an original and one copy (electronic is preferred) to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division / WQCD-CAS-B2
Compliance Assurance Section / Drinking Water Enforcement Team
Attention: Margaret Talbott
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Email: margaret.talbott@state.co.us

(For any facsimile transmittals, please include a cover sheet addressed to Ms. Talbott.)

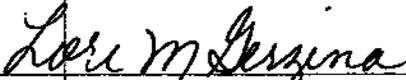
- D. Paragraph 15(c), is deleted and removed from Enforcement Order Number DC-090116-3.

SCOPE OF AMENDMENT NUMBER ONE

The scope of this Amendment Number One to Enforcement Order Number DC-090116-3 is limited to the revisions outlined above. All other terms and conditions of the Enforcement Order shall remain unchanged and in effect.

Issued at Denver, Colorado, this 23rd day of May, 2011.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Lori M. Gerzina, Section Manager
Compliance Assurance Section
Water Quality Control Division



**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION**

ENFORCEMENT ORDER

NUMBER: DC-090116-3

**IN THE MATTER OF: TOWN OF MERINO
PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO-0138025
LOGAN COUNTY, COLORADO**

Pursuant to the authority vested in the Colorado Department of Public Health and Environment (the "Department") by §25-1-109 and §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."), which authority has been delegated to the Department's Water Quality Control Division (the "Division"), the Division hereby makes the following findings and issues the following Enforcement Order:

GENERAL FINDINGS

1. The Town of Merino owns and/or operates a drinking water system located in the vicinity of 206 Colorado Avenue of the Town of Merino, Logan County, Colorado (the "System").
2. The Town of Merino is a person as defined by 5 CCR 1003-1, §1.5.2(98).
3. The Town of Merino is a supplier of water within the meaning of §25-1.5-201(2), C.R.S. and its implementing regulation, 5 CCR 1003-1, §1.5.2(128).
4. The System is a public water system as defined by §25-1.5-201(1), C.R.S. and its implementing regulation, 5 CCR 1003-1, §1.5.2(107).
5. The Public Water System Identification Number ("PWSID"), assigned to the System by the Division is PWSID # CO-0138025.
6. Pursuant to 5 CCR 1003-1, §1.2, the System is subject to the *Colorado Primary Drinking Water Regulations* (the "Regulations"), which were adopted pursuant to §25-1.5-203, C.R.S.
7. The Town of Merino provides piped water for human consumption from the System to at least fifteen (15) service connections used by year-round residents of the area served by the System and/or regularly serves at least twenty-five (25) year-round residents. The System is therefore classified as a "community water system" as defined by 5 CCR 1003-1, §1.5.2(15).
8. The System's source of water is groundwater as defined by 5 CCR 1003-1, §1.5.2(63).

Exhibit A

First Violation
(Failure to Comply with the Maximum Contaminant Level for Uranium)

9. Pursuant to 5 CCR 1003-1, §2.6, Table 2-7(2), the maximum contaminant level for uranium is 30 micrograms per liter (µg/L).
10. Pursuant to 5 CCR 1003-1, §6.3.5, compliance with the maximum contaminant level is determined by a running annual average at each sampling point. If the average of any sampling point is greater than the maximum contaminant level, then the system is out of compliance with the maximum contaminant level.
11. In a letter dated December 8, 2003, the Division advised the System that it would be required to conduct the initial four (4) quarters sampling between January 1, 2004, and December 31, 2007, for uranium under the 2000 changes to the Radionuclide Rule.
12. A review of the radiological monitoring data from January 22, 2006, to present, provided to the Department by the System, establishes that the running annual average of samples obtained by the System at quarterly intervals exceeds the maximum contaminant level for uranium:

Uranium Concentration (µg/L) at Sampling Point 001				
Quarter 1	Quarter 2	Quarter 3	Quarter 4	Running Annual Average
1/22/06 47	4/5/06 48	7/24/06 48	10/11/06 54	49
4/5/06 48	7/24/06 48	10/11/06 54	1/23/07 60	53
7/24/06 48	10/11/06 54	1/23/07 60	4/10/07 52	54
10/11/06 54	1/23/07 60	4/10/07 52	7/24/07 53	55
1/23/07 60	4/10/07 52	7/24/07 53	10/22/07 47 10/24/07 52	54
4/10/07 52	7/24/07 53	10/22/07 47 10/24/07 52	1/28/08 52	52
7/24/07 53	10/22/07 47 10/24/07 52	1/28/08 52	4/7/08 56	53
10/22/07 47 10/24/07 52	1/28/08 52	4/7/08 56	7/28/08 55	53
1/28/08 52	4/7/08 56	7/28/08 55	10/14/08 55	55

13. The Town of Merino's failure to comply with the maximum contaminant level for uranium constitutes violation(s) of 5 CCR 1003-1, §2.6, Table 2-7(2).

COMPLIANCE ORDER

Based upon the foregoing factual and legal determinations and pursuant to 5 CCR 1003-1, §1.6.7, The Town of Merino is hereby ordered to:

14. Immediately comply with the *Colorado Primary Drinking Water Regulations*, 5 CCR 1003-1, Articles 1 through 13.

Further, the Division hereby orders The Town of Merino to comply with the following specific terms and conditions of this Order.

15. In order to ensure long-term compliance with the maximum contaminant levels for radionuclides, specifically including uranium, The Town of Merino shall evaluate and upgrade, as needed, the System's water sources and/or treatment process(es) in accordance with the following schedule:
- a. By April 30, 2009, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) to evaluate and recommend radiological treatment technologies or alternate water sources to The Town of Merino to ensure compliance with the maximum contaminant level for uranium.
 - b. By October 31, 2009, submit for Department review and comment a finalized Preliminary Engineering Report for system improvements to comply with the maximum contaminant levels for radionuclides, specifically including uranium.
 - i. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
 - ii. The Preliminary Engineering Report (if applicable) submittal package must be developed consistent with the *Colorado Drinking Water Preliminary Engineering Report Guidance & Review Checklist Form*. (see http://www.cdphe.state.co.us/wq/opa/pdf/19_CPERGuideChecklistDW.pdf)
 - iii. The Preliminary Engineering Report (if applicable) must clearly identify the specific treatment technology The Town of Merino will use to ensure compliance with the maximum contaminant levels for radionuclides, specifically including uranium.
 - iv. The Preliminary Engineering Report (if applicable) must include a process flow schematic of the distribution system from wellheads to points of use, including flow rates, treatment facilities, storage tanks and all service connections supplied by the wells. Alternative treatment locations for the selected treatment process or processes must be evaluated with a recommended location selection. The process flow schematic information and evaluation must be included to ensure all water from the System is treated.
 - v. The Preliminary Engineering Report (if applicable) must include a proposal for management of residuals from the treatment technology selected.

Exhibit A

- vi. The Preliminary Engineering Report submittal package must include design calculations showing the proposed treatment system is properly sized and chlorine contact times can be met for expected flow rates.

{Please note that, prior to construction, the Department must give final approval to any modifications to the System's water source or treatment process. The Department will not perform a detailed review and final approval of any proposed modifications until the final design plans and specifications have been received pursuant to paragraph 15(d) below.}

- c. By February 28, 2010, submit for Department review and comment the final Design Report for The Town of Merino System improvements to comply with the maximum contaminant levels for radionuclides specifically including uranium.
 - d. By August 1, 2010, submit Final Design Plans and Specifications for the System improvements for Department review and approval in accordance with the *State of Colorado Design Criteria for Potable Water Systems*.
 - e. The Final Design Plans and Specifications submittal package must include specifications for treatment equipment and/or chemical additives that come in contact with the water that indicate ANSI standards 60 and 61 are met (NSF certification).
 - f. By October 15, 2011, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels for uranium.
 - g. By December 1, 2011, submit the Professional Engineer's Certification that the System improvements to comply with the maximum contaminant levels for radionuclides specifically including uranium were constructed/installed as approved by the Department.
16. By no later than March 31, 2009, The Town of Merino shall complete an evaluation to determine appropriate interim measures to ensure that the System is providing the best possible quality of water available until the System implements improvements to ensure long-term compliance with the radiological maximum contaminant levels. The Town of Merino shall submit a written report of the results of this evaluation to the Division for review and comment. Implementation of the interim measures identified by The Town of Merino shall become a condition of this Enforcement Order unless notified by the Division, in writing, that alternate or additional interim measures are appropriate. If the Division imposes alternate or additional interim measures, they shall also become a condition of this Enforcement Order.
 17. Beginning January 1, 2009, The Town of Merino is authorized to cease performing quarterly uranium monitoring. In the alternative, The Town of Merino shall perform annual uranium monitoring consisting of collection of a single sample from each entry point to the distribution system one time per calendar year. The radiological samples must be properly collected and analyzed by a Department certified laboratory in accordance with approved methods. The Town of Merino shall provide the Department with the results of the radiological analyses within ten (10) calendar days of the end of the monitoring period.
 18. By no later than March 31, 2009, and every three (3) months thereafter, The Town of Merino shall issue a public notice in accordance with 5 CCR 1003-1, Article 9.2 for each radiological maximum contaminant level violation identified in this Enforcement Order until The Town of Merino has

Exhibit A

effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7. Within ten (10) calendar days of completion of each required public notification, The Town of Merino shall submit to the Department, along with the mandatory Public Notification certification of delivery, a representative copy of notices distributed, published, posted, and/or made available to the persons served by the system and/or to the media. *(Attached are copies of procedures and forms to assist you with the public notification requirements.)*

19. The Town of Merino shall submit "System Improvement Project - Progress Reports" to the Division every ninety (90) calendar days. The first report shall be submitted to the Division by March 31, 2009. At a minimum, each report shall clearly indicate the status of the system improvement project at the time the report is filed and outline activities to be undertaken within the next ninety (90) calendar days. Each report shall also detail any public notification provided during that period. These reports shall be required until the System has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7.

NOTICES AND SUBMITTALS

For all documents, plans, records, reports and replies required to be submitted by this order, the The Town of Merino shall submit an original and one copy (electronic is preferred) to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division / WQCD-WQP-B2
Compliance Assurance and Data Management Section / Enforcement Team
Attention: Jackie Whelan
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Email: jackie.whelan@state.co.us

(For any facsimile transmittals, please include a cover sheet addressed to Ms. Whelan.)

Pursuant to 5 CCR 1003-1, §1.6.4(e), all reports, notices, summaries, and certifications required to be submitted to the Department by the public water system must bear the original signature of the owner or the owner's authorized representative.

NOTICE OF COMPLETION

The Town of Merino shall submit a Notice of Completion to the Division upon satisfactory completion of all requirements of this Enforcement Order. The Division shall either accept or reject the Notice of Completion in writing. If the Division rejects the Notice of Completion, it shall include in its notice a statement identifying the requirements that the Division considers incomplete or not satisfactorily performed and a schedule for completion. If the The Town of Merino wishes to dispute the Division's rejection of its Notice of Completion, it shall, within fifteen (15) calendar days of receipt of the Division's rejection, submit a written

Exhibit A

statement as to its belief of full compliance, addressing in detail all concerns the Division raised in the rejection letter to the System's Notice of Completion.

PRIOR APPROVAL REQUIRED

Pursuant to 5 CCR 1003-1, §1.11.2, no person shall commence construction of any new waterworks, or make improvements to or modify the treatment process of an existing waterworks, or initiate use of a new source, until plans and specifications for such construction, improvements, modifications or use have been submitted to, and approved by the Department. A Professional Engineer registered in the State of Colorado shall design all treatment systems serving a community water supply. The Department shall grant such approval when it finds that the proposed facilities are capable of complying, on a continuous basis, with all applicable laws, standards, rules and regulations.

POTENTIAL ADMINISTRATIVE/CIVIL AND CRIMINAL PENALTIES

You are also advised, pursuant to §25-1-114.1, C.R.S., that violators of the Regulations or final Enforcement Orders issued by the Department are subject to civil or administrative penalties of up to one thousand dollars (\$1,000) per violation per day, to be imposed by the Department or a State District Court. Further, pursuant to §25-1-114(4), C.R.S., any person, association, or corporation, or the officers thereof, who violates, disobeys, or disregards any provision of the Regulations or an Enforcement Order is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than one thousand dollars (\$1,000), or by imprisonment in the county jail for not more than one (1) year, or by both such fine and imprisonment and, in addition to such fine and imprisonment, shall be liable for any expense incurred by health authorities in removing any nuisance, source of filth, or cause of sickness. By virtue of issuing this Enforcement Order, the Department has not waived its right to bring an action for administrative, civil or criminal penalties and may bring such action in the future.

REQUEST FOR HEARING OR APPEAL

You are further advised, pursuant to 5 CCR 1003-1, §1.6.7(g), that a recipient of an Enforcement Order may request a hearing contesting such order. Requests for such a hearing shall be filed in writing with the Department within thirty (30) calendar days after service of the order. Such requests shall state the grounds upon which the order is contested and state the amount of time the recipient estimates will be required for the hearing. Hearings on Enforcement Orders shall be held in accordance with applicable provisions of the State Administrative Procedure Act, Article 4 of Title 24, C.R.S.

Alternatively (or additionally), under section 25-1-113(1), C.R.S., you may file a request for judicial review in the State district court in the county in which you reside or in the city and county of Denver within ninety (90) calendar days of your receipt of this Enforcement Order.

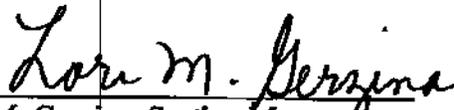
ADDITIONAL ACTION

You are further advised that under §25-1-114.1(1), C.R.S., the Department may institute a civil action against any person who violates a final Enforcement Order of the Department issued for violation of any minimum general sanitary standard or regulation adopted pursuant to §25-1.5-203, C.R.S.

Additionally, the Department may request the Attorney General to seek a temporary restraining order or permanent injunction to prevent or abate any violation of a minimum general sanitary standard or regulation adopted pursuant to §25-1.5-203, C.R.S. Further information concerning the aforementioned action is contained in §25-1-114.1(3), C.R.S.

Issued at Denver, Colorado, this 16th day of January, 2009.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Lori M. Gerzina, Section Manager
Compliance Assurance and Data Management Section
Water Quality Control Division