

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

4300 Cherry Creek Dr. S. Laboratory Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
Located in Glendale, Colorado (303) 692-3090

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

July 14, 2011

Certified Mail Number: 7006 2760 0003 4263 9458

PWSID# CO-0135143

Mr. Jack A. Voorhies, Registered Agent
Big Elk Meadows Water Association
P.O. Box 440
Lyons, Colorado 80540

RE: Service of Drinking Water Enforcement Order, Number: DC-110714-1

Dear Mr. Voorhies:

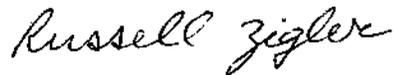
Big Elk Meadows Water Association is hereby issued the enclosed Enforcement Order (the "Order"). This Order is issued by the Colorado Department of Public Health and Environment, Water Quality Control Division (the "Department") pursuant to the authority given to the Department by §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."). The Department bases this Order upon findings that Big Elk Meadows Water Association has violated the *Colorado Primary Drinking Water Regulations* (the "Regulations") as described in the enclosed Order.

As a recipient of an Order, Big Elk Meadows Water Association may request a formal hearing to contest the Order in accordance with the Regulations, 5 CCR 1003-1, §1.6.7(g). 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, at a minimum shall contain the information specified in 5 CCR 1003-1, §1.6.7(g), and 5CCR 1002-21, §21.4(B)(2). Hearings on Orders shall be held in accordance with applicable provisions of the State Administrative Procedure Act, Article 4 of Title 24, C.R.S. and the procedural rules promulgated in 5 CCR 1002-21.

This action could result in the imposition of administrative or civil penalties. The Department or a State District Court is authorized pursuant to §25-1-114.1, C.R.S., to impose a penalty of up to \$1,000 per violation per day. Please be advised that the Department is continuing its investigation into this matter and the Department may identify supplementary violations that warrant amendments to this Order or the issuance of additional enforcement actions.

Should Big Elk Meadows Water Association desire to informally discuss this matter with the Department or if you have any questions regarding the Order, please don't hesitate to contact Amy Schultz at (303) 691-4927 or by electronic mail at amy.schultz@state.co.us.

Sincerely,



Russell Zigler, Legal Assistant
Enforcement Unit
Compliance Assurance Section
WATER QUALITY CONTROL DIVISION

Enclosure

cc: Larimer County Health Department
Nelson Renouf, ORC, P.O. Box 440, Lyons, Colorado 80540

ec: Kelly Jacques, Engineering Section, CDPHE
Dick Parachini, Watershed Program, CDPHE
Lori Moore, Facility Operators Program, CDPHE
Shawn McCaffrey, EPA Region VIII
Amy Schultz, Case Lead, CDPHE



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

ENFORCEMENT ORDER

NUMBER: DC-110714-1

**IN THE MATTER OF: BIG ELK MEADOWS WATER ASSOCIATION
PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO-0135143
LARIMER 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 (the "Division"), the Division hereby makes the following findings and issues the following Enforcement Order:

GENERAL FINDINGS

1. Big Elk Meadows Water Association ("Big Elk Meadows WA") owns and/or operates a drinking water system located in the vicinity of 29 Willow Drive, Lyons, Colorado, in Larimer County, Colorado (the "System"), at or about Latitude 40.269723, Longitude -105.427223 ("the System").
2. Big Elk Meadows WA is a person as defined by 5 CCR 1003-1, §1.5.2(98).
3. Big Elk Meadows WA 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-0135143.
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. Pursuant to 5 CCR 1003-1, §1.5.2(15), a public water system that serves 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 is classified as a "community water system." The Big Elk Meadows WA provides piped water for human consumption to three-hundred (300) residents and fifty-one (51) transient consumers and is therefore classified as a "community water system."

- 8. The System's source of water is surface water as defined by 5 CCR 1003-1, §1.5.2(129).
- 9. On August 28, 2009, a Division representative conducted a compliance inspection of the System, pursuant to the Division's authority under §25-1.5-204, C.R.S. and 5 CCR 1003-1, §1.7, to determine the System's compliance with the Regulations.

First Violation
(Exceedance of the Maximum Contaminant Levels for
Total Trihalomethanes and Haloacetic Acids (five))

- 10. Pursuant to 5 CCR 1003-1, §2.4, Table 2-5(1) and (2), the maximum contaminant levels of 0.080 mg/L for total trihalomethanes ("TTHM") and 0.060 mg/L for haloacetic acids (five) ("HAA5") are applicable to all community and non-transient, non-community water systems.
- 11. Pursuant to 5 CCR 1003-1, §7.6.3(b)(1), the System must monitor for TTHM and HAA5 at the following frequency and locations:

Type of System	Minimum Monitoring Frequency	Sample Location in the Distribution System
Surface water or groundwater under the direct influence of surface water system serving fewer than 500 persons.	One sample per year per treatment plant during month of warmest water temperature.	Locations representing maximum residence time. If the sample (or average of annual samples, if more than one sample is taken) exceeds the MCL, the system must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the system meets criteria in paragraph (b)(1)(v) of this section.

- 12. In a letter dated November 4, 2009, the Division increased Big Elk Meadows WA's TTHM and HAA5 monitoring to quarterly beginning in the fourth quarter (October – December) of calendar year 2009 as a result of its August 27, 2009, TTHM and HAA5 maximum contaminant level exceedance.
- 13. Pursuant to 5 CCR 1003-1, §7.6.4(b)(1)(i), for systems monitoring quarterly, compliance with maximum contaminant levels in 5 CCR 1003-1, §2.4, Table 2-5, must be based on a running annual arithmetic average, computed quarterly, of quarterly arithmetic averages of all samples collected by the system as prescribed in 5 CCR 1003-1, §7.6.3(b)(1).
- 14. Pursuant to 5 CCR 1003-1, §7.6.5(a), Systems required to sample quarterly or more frequently must report to the Department within ten (10) days after the end of each quarter in which samples were collected, notwithstanding the provisions of 5 CCR 1003-1, §1.6.4.
- 15. Monitoring data submitted to the Division from the System establish the following TTHM and HAA5 running annual arithmetic averages for the System:

Total Trihalomethanes in mg/L				Running Annual Average in mg/L
3 rd Q 2009 N/A	4 th Q 2009 0.0407	1 st Q 2010 0.0173	2 nd Q 2010 0.266	0.108
4 th Q 2009 0.0407	1 st Q 2010 0.0173	2 nd Q 2010 0.266	3 rd Q 2010 0.0547	0.095
1 st Q 2010 0.0173	2 nd Q 2010 0.266	3 rd Q 2010 0.0547	4 th Q 2010 0.0614	0.100
2 nd Q 2010 0.266	3 rd Q 2010 0.0547	4 th Q 2010 0.0614	1 st Q 2011 0.0548	0.109

Haloacetic Acids (five) in mg/L				Running Annual Average in mg/L
3 rd Q 2009 N/A	4 th Q 2009 0.03108	1 st Q 2010 0.0583	2 nd Q 2010 0.424	0.128
4 th Q 2009 0.03108	1 st Q 2010 0.0583	2 nd Q 2010 0.424	3 rd Q 2010 0.0372	0.138
1 st Q 2010 0.0583	2 nd Q 2010 0.424	3 rd Q 2010 0.0372	4 th Q 2010 0.0618	0.145
2 nd Q 2010 0.424	3 rd Q 2010 0.0372	4 th Q 2010 0.0618	1 st Q 2011 0.0348	0.139

16. Pursuant to 5 CCR 1003-1, §7.6.4(b)(1)(iii), if the running annual arithmetic average of quarterly averages covering any consecutive four-quarter period exceeds the maximum contaminant level, the system is in violation of the maximum contaminant level and must notify the public pursuant to 5 CCR 1003-1, §9.2, in addition to reporting to the Department pursuant to 5 CCR 1003-1, §7.6.5.
17. Big Elk Meadows WA's failure to comply with the maximum contaminant levels for total trihalomethanes and haloacetic acids (5) constitute violations of 5 CCR 1003-1, §2.4, Table 2-5(1) and (2).

Second Violation
(Failure to Develop/Submit a Monitoring Plan)

18. Pursuant to 5 CCR 1003-1, §1.12, each public water system shall develop and implement a monitoring plan. The public water system shall maintain the plan and make it available for inspection by the Department.
19. Pursuant to 5 CCR 1003-1, §1.12.2(a)(3), the System was required to submit a monitoring plan to the Department by April 10, 2005.

20. Pursuant to 5 CCR 1003-1, §1.12.3, a public water system is required to submit any changes related to the monitoring plan under 5 CCR 1003-1, §1.12.1(a), (b), (c), (d) or (e) to the Department within thirty (30) calendar days following the effective date of the change.
21. During the August 28, 2009, Division inspection of the System, the Division Representative determined that System was utilizing a Division template for its monitoring plan and that the template was missing several individual rule sections. In a letter dated October 8, 2009, the Division Representative requested that Big Elk Meadows WA expand its monitoring plan to cover all water quality monitoring parameters and provide a copy of the revised monitoring plan to the Division.
22. Division records establish that Big Elk Meadows WA has neither developed nor submitted the required monitoring plan to the Division.
23. Big Elk Meadows WA's failure to develop a complete monitoring plan for the System constitutes a violation of 5 CCR 1003-1, §1.12. If Big Elk Meadows WA subsequently developed a complete monitoring plan or revised its current incomplete monitoring plan, but failed to submit a copy of the monitoring plan for the System to the Division, such failure constitutes a violation of 5 CCR 1003-1, §1.12.2(a)(3) or 1.12.3.

COMPLIANCE REQUIREMENTS

Based upon the foregoing factual and legal determinations and pursuant to 5 CCR 1003-1, §1.6.7, Big Elk Meadows WA is hereby ordered to:

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

Further, the Division hereby orders Big Elk Meadows WA to comply with the following specific terms and conditions of this Enforcement Order.

25. In order to ensure long-term compliance with the *Colorado Primary Drinking Water Regulations*, specifically including the TTHM and HAA5 maximum contaminant levels (Article 2 and 7) for public water supplies, the Big Elk Meadows WA shall evaluate the System's water sources distribution system operational practices, and/or treatment processes and modify, alter or upgrade them, as needed, in accordance with the following schedule:
 - a. Within forty-five (45) calendar days from the date of this order, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) to evaluate and recommend disinfection byproduct treatment technologies, operational changes, distribution upgrades, or alternate water sources to the Big Elk Meadows WA to ensure compliance with the maximum contaminant levels for TTHM and HAA5.

b. Within ninety (90) calendar days from the date of this order, submit a Preliminary Engineering Report for Department review specifying a plan for the System that will ensure long-term compliance with the Regulations, specifically including the TTHM and HAA5 maximum contaminant levels (Article 2 and 7). The Department shall provide written comments on the Preliminary Engineering Report within thirty (30) days of submittal¹. The Big Elk Meadows WA shall incorporate the Department's comments into the Preliminary Engineering Report and proceed according to the following implementation schedule:

i. If the Preliminary Engineering Report proposes system improvements which require Final Design Plans and Specifications in accordance with the *State of Colorado Design Criteria for Potable Water Systems*, then Final Plans and Specifications must be submitted for Department review and approval within one hundred and fifty (150) calendar days from the date of this Enforcement Order. In addition:

1. Within one hundred eighty (180) calendar days from the date of Division approval of Final Plans and Specifications, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels for TTHM and HAA5.

2. Within fourteen (14) calendar days of completion/implementation of the System improvements, submit a completed *Construction As Approved Certification Form* certifying that the System improvements comply with the maximum contaminant level for TTHM and HAA5 were constructed/installed as approved by the Department. This form is available at:

<http://www.cdphe.state.co.us/wq/engineering/pdf/2010/ConstructionCertFormDrinkingWater.pdf>

ii. If the Preliminary Engineering Report does not propose system improvements which require Final Design Plans and Specifications in accordance with the *State of Colorado Design Criteria for Potable Water Systems*, Big Elk Meadows WA shall implement the plan as specified in the Preliminary Engineering Report within one hundred and fifty (150) calendar days of receiving written comments from the Department.

26. Big Elk Meadows WA shall submit "System Improvement Project - Progress Reports" to the Department each calendar quarter. The first report shall be submitted to the Department quarterly. At a minimum, each report shall clearly indicate the status of Big Elk Meadows WA's compliance with this Enforcement Order and outline activities to be undertaken by Big Elk Meadows WA to maintain compliance with this Order within the next calendar quarter. These reports shall be required until the System has demonstrated reliable and consistent compliance with the requirements of 5 CCR 1003-1, §7.6.4(b)(1)(iii).

¹ The Department reserves the right to reject the Preliminary Engineering Report, in writing, and impose an alternate compliance plan for the System, which shall become a condition of this order if imposed.

27. Within thirty (30) days from the date of this Order, Big Elk Meadows WA shall develop and implement a monitoring plan pursuant to 5 CCR 1003-1, §1.12, which includes a microbiological contaminant sample-siting plan, 5 CCR 1003-1, §5.1.1(a), to reflect the System's current configuration, treatment and operation. The plan shall specifically outline how Big Elk Meadows WA will ensure that samples collected are representative of water quality throughout the distribution system(s), that samples should be taken both with temporal and spatial separation to ensure representative samples are obtained of water quality throughout the distribution system and throughout the month of service and that samples are not to be taken all on the same day. Big Elk Meadows WA shall provide the Division with a copy of its written monitoring plan upon completion.

A guidance document on how to prepare a monitoring plan can be viewed at the following internet location:

<http://www.cdphe.state.co.us/wq/drinkingwater/pdf/MonitoringPlanTemplate.pdf>

A guidance document on how to prepare a small system microbiological rule sampling plan can be viewed at the following internet location:

http://www.cdphe.state.co.us/wq/drinkingwater/pdf/Bulletin02_01BactSamplingPlanguidanceDoc.pdf

Pursuant to 5 CCR 1003-1, §1.12.1(e), each monitoring plan prepared by the System must contain Individual Rule Sampling Plans. Each sampling plan shall meet all requirements of the respective provision, including:

- a. Frequency and approximate time of collection;
 - b. Sample site location identification and associated identification number;
 - c. If appropriate, justification for the site selection;
 - d. Sample preservation, quality assurance, and quality control procedures, including procedures for equipment calibration;
 - e. Analysis procedure (certified laboratory or on-site by a party approved by the Department);
 - f. Monitoring results presentation format;
 - g. Procedures to assess and report compliance status for MCLs, ALs, MRDLs, TTs and, if applicable, disinfection byproduct precursor removal efficiency;
 - h. The rationale used by the system to identify the sampling locations selected to represent the distribution system, and
 - i. A process to review and update the selected distribution system sampling locations to account for changes due to growth or other significant changes to the distribution system.
28. Within thirty (30) calendar days after receipt of this Order, if it has not already done so, Big Elk Meadows WA shall issue a public notice in accordance with 5 CCR 1003-1, §9.2 for each violation identified in this Order. Within ten (10) calendar days of completion of each required public notification, Big Elk Meadows WA shall submit to the Division, along with the mandatory certification, a representative copy of each type of notice distributed, published, posted, and/or made available to the persons served by the system and/or to the media.

*Additional guidance for proper public notification can be viewed at the following Internet location:
http://www.cdphe.state.co.us/wq/drinkingwater/pdf/PublicNotice/PN_Guidance_Mar2003.pdf*

29. All documents submitted under this Order shall use the same titles as stated in the Order and shall reference both the Order number and the paragraph number pursuant to which the document is required.

NOTICES AND SUBMITTALS

30. For all documents, plans, records, reports and replies required to be submitted by this order, Big Elk Meadows WA 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-B2-CAS
Compliance Assurance Section
Attention: Amy Schultz
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Email: amy.schultz@state.co.us
Fax: (303) 782-0390

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

31. All reports, notices, summaries, and certifications required to be submitted to the Division by the public water system must bear the original signature of the owner or the owner's authorized representative.

NOTICE OF COMPLETION

32. Big Elk Meadows WA 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 Big Elk Meadows WA 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 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

33. 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

34. 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

35. 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, at a minimum, shall contain the information specified in 5 CCR 1003-1, §1.6.7(g) and 5 CCR 1002-21, §21.4(B)(2). 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. and the procedural rules promulgated in 5 CCR 1002-21.

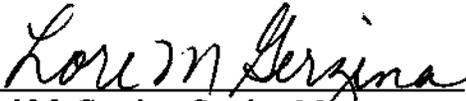
ADDITIONAL ACTION

36. 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.

37. 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 14 day of July, 2011.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT


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