

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200 HELENA, MONTANA 59626

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February 22, 2008

Rick Wolfname, President Northern Cheyenne Tribal Council P.O. Box 128 Lame Deer, MT 59043

Re:

Emergency Order Birney Water System Docket No. SDWA-08-2008-0020

Dear President Wolfname:

Enclosed is an Emergency Administrative Order (Order or EAO) issued under section 1431 of the Safe Drinking Water Act (SDWA), 40 U.S.C. § 300i. In its current state, the water supplied by the Birney Water System (System), may present an imminent and substantial endangerment to the health of persons. The Order is based on a loss of pressure in the distribution system, which can cause a net movement of water from outside the pipe to the inside through cracks, breaks, or joints in the distribution system that are common in all water systems. Such a system failure may carry with it a high potential that fecal contamination or other disease causing organisms could enter the distribution system.

Manager Winslow White Crane and his staff took quick and appropriate measures to notify EPA and ensure safe water was available to residents. This prompt notification also allowed EPA to provide assistance in diagnosing and correcting the problem. The purpose of the Order is to ensure that, as water service is restored, public health is protected.

The enclosed Order sets forth the actions that you must take to ensure that the people served by the water supply are provided with safe drinking water. The Order requires that the Northern Cheyenne Utility Organization conduct the following activities: (1) within 24 hours, provide written intent to EPA to comply with the EAO; (2) continue to provide alternative water to all users of the system; (3) inform EPA when necessary repairs are complete and water is being delivered to homes; (4) conduct increased monitoring for total coliform bacteria; and (5) continue to provide public notice that the water is unsafe to drink until notified otherwise by EPA.

EPA is committed to working with you to ensure the safety of Birney's public water supply. If your staff has questions specific to the elements of the Order, the most knowledgeable people regarding these issues are Barbara Burkland, Environmental Scientist, who can be reached at (406)457-5009, or Marc Weiner, Enforcement Attorney, who can be reached at (303)312-6913.

We urge your prompt attention to this matter.

Sincerely

EPA Montana Office

David Rochlin, Acting Director Legal Enforcement Program

Winslow White Crane, Director cc: Northern Cheyenne Utility Commission

> Ingrid Gardner, Director **Environmental Protection Department** Northern Cheyenne Tribe

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IN THE MATTER OF)	SEARTHGOLVER
Northern Cheyenne Utilities Commission)	
Birney Water System)	
PWS ID# 083090062	·
Respondent)	
)	EMERGENCY
)	ADMINISTRATIVE
)	ORDER
Proceedings under section 1414(g)	
of the Safe Drinking Water Act,	
42 U.S.C. § 300g-3(g)	Docket No. SDWA-08-2008-0020

STATUTORY AUTHORITY

The following Findings are made and Order issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) by section 1431 of the Safe Drinking Water Act (the Act), 42 U.S.C. § 300i, as properly delegated to the Supervisors of the EPA Montana Office and Legal Enforcement Program of the Office of Enforcement, Compliance and Environmental Justice, EPA Region 8.

JURISDICTION

- EPA has jurisdiction to issue emergency orders pursuant to section 1431 of the Act, 42 U.S.C. § 300i.
- EPA has primary enforcement responsibility for the Act on the Northern
 Cheyenne Indian Reservation. No other authority has applied for and been approved to administer the program on the Northern Cheyenne Indian

Reservation.

FINDINGS

- 1. The Northern Cheyenne Utilities ("Respondent") is a tribal agency under the laws of the Northern Cheyenne Tribal Council and is therefore a "person" within the meaning of 40 C.F.R. § 141.2 for purposes of federal enforcement.
- Respondent operates the Birney Water System ("System"), located on the
 Northern Cheyenne Indian Reservation, approximately 25 miles southeast of
 Lame Deer, Montana, that provides water for human consumption. The System
 serves approximately 116 residents annually through 25 residential service
 connections.
- 3. The System is a "public water system" and a "community water system" within the meaning of the Act and the regulations. 40 C.F.R. § 141.2.
- 4. Respondent operates the System and is therefore a "supplier of water" within the meaning of the Act and the regulations. 42 U.S.C. § 300f(5) and 40 C.F.R. § 141.2. Respondent is, therefore, required to comply with the Act and regulations. 42 U.S.C. § 300g, and 40 C.F.R. part 141.
- 5. The System is supplied solely by groundwater from one community well.
- 6. EPA has determined that conditions exist at Respondent's public water system that may present an imminent and substantial endangerment to the health of persons. The current emergency conditions were initiated by a February 18, 2008,

- event when the System's operator noticed low pressure in the water system. On February 19, the problem was identified as a broken pipe in the well, resulting in only a fraction of pumped water reaching the tank. On February 20 the well failed completely and pressure was lost in the distribution system.
- 7. Due to the chain of events described above, current emergency conditions exist as a result of a loss of pressure in the distribution system that occurred on or about February 20, 2008. Loss of pressure may cause a net movement of water from outside the pipe to the inside through cracks, breaks, or joints in the distribution system that are common in all water systems. Back siphonage is also a condition resulting from low or no pressure. Such system failures carry a high potential that fecal contamination or other disease causing organisms could enter the distribution system. Pressure has not been restored as of February 22, 2008.
- 8. Respondent did consult with EPA as soon as practical, and no later than 24 hours after the public water system learned of the emergency situation that had significant potential for serious adverse effects on human health as a result of short-term exposure, as required by 40 C.F.R. §§ 141.203(b)(2) and 141.202(a)(8).
- 9. This Order and the requirements set forth herein are necessary to ensure adequate protection of public health based on EPA's primary enforcement responsibility for the Act in Indian country.

- 10. Prior to issuing this Order, EPA consulted with local (Tribal) authorities to confirm the information on which this Order is based and to ascertain the actions which such authorities are taking.
- EPA has direct implementation authority and is responsible for enforcement of the Safe Drinking Water Act on Indian Lands.

EMERGENCY ADMINISTRATIVE ORDER

- Within 24 hours of receipt of this Order, Respondent shall notify EPA in writing
 of its intention to comply with the terms of this Order. The written response shall
 include a general plan for compliance with each of the elements of this Order.
- 2. Upon the effective date of this Order, Respondent shall notify all water users of Respondent's Water System, on a weekly basis, that an alternative potable water supply is available. The alternative water supply shall be from an EPA regulated drinking water supply that meets the National Primary Drinking Water Regulations or a licensed water distributor, and must be made available at no cost as needed for drinking and cooking until Respondent receives written notification from EPA that alternative water is no longer necessary. Respondent shall provide the alternative water at a central location that is accessible to all persons served by the water system. Respondent shall provide a sufficient quantity of water for

- reasonable domestic uses, at a minimum, two liters daily per person served by the water system.
- 3. Respondent shall investigate and report in writing to EPA no later than 2/27/08, the known or suspected cause of the loss of pressure event and what measures will be taken to prevent a reoccurrence of this problem.
- 4. Prior to the distribution system being restored to service, Respondent will complete repairs to the well (no later than 2/27/08), clean and flush the system including disinfection of the distribution system and any storage tanks that are part of the system. Once the distribution system is restored to service, respondent shall maintain a detectable disinfectant residual as measured at the far ends of the distribution system. Respondent shall monitor the disinfectant residual daily at the same time total coliform sampling is conducted and report those results to EPA with total coliform results, by FAX. Respondent shall continue monitoring and reporting disinfectant residual until receiving written notice from EPA.
- 5. Upon the effective date of this Order, Respondent shall comply with the total coliform maximum contaminant level ("MCL") as set forth in 40 C.F.R. § 141.63.
- 6. Once the distribution system is restored to service, Respondent shall collect consecutive daily special purpose total coliform samples of the water to determine compliance with the MCL as set forth in 40 C.F.R. § 141.63. Respondent shall designate one sample as the monthly compliance sample. Respondent shall

continue daily total coliform monitoring until receiving written notice from EPA to discontinue daily sampling. Respondent shall report daily total coliform sampling results to EPA by FAX immediately upon receiving the laboratory results.

- 7. After Respondent receives written notification from EPA to discontinue daily total coliform sampling, Respondent shall conduct weekly bacteriological sampling to determine compliance with the MCLs for total coliform bacteria as stated in
- 40 C.F.R. § 141.63. Respondent shall report weekly total coliform sampling results to EPA by FAX immediately upon receiving the laboratory results.
- 8. Respondent shall continue weekly bacteriological monitoring until Respondent receives notification from EPA to discontinue weekly bacteriological sampling.

 Respondent shall thereafter resume monthly total coliform sampling as required by 40 C.F.R. § 141.21 to determine compliance with the MCLs for total coliform bacteria as stated in 40 C.F.R. § 141.63. Respondent shall report analytical results to EPA within the first 10 days of the end of the monitoring period, as required by 40 C.F.R. § 141.31(a).
- 9. Respondent shall collect all total coliform samples at sites which are representative of water throughout the distribution system or according to the written sample site plan Respondent previously submitted to EPA pursuant to

40 C.F.R. § 141.21(a).

- 10. If any one of the designated compliance sample results are total coliform-positive, Respondent shall conduct repeat sampling as required by 40 C.F.R. § 141.21(b), which requires public water systems that collect five or fewer total coliform samples to collect a minimum of four repeat samples within 24 hours of being notified of the total coliform-positive sample. Furthermore, Respondent shall comply with the requirements of 40 C.F.R. § 141.21(b)(5), which requires public water systems that collect five or fewer total coliform samples to collect a total of 5 routine total coliform samples the month following a total coliform-positive compliance sample result.
- 11. After analysis of total coliform sample results, EPA may request the Respondent to submit a detailed plan to EPA for bringing Respondent's public water system into compliance with the MCL for coliform bacteria at 40 C.F.R. § 141.63. The plans shall include proposed system modifications, estimated costs of modifications, and a schedule for construction of the project and compliance with the MCL for coliform bacteria. The proposed schedule shall include specific milestone dates, a final compliance date to be determined by EPA, and shall be submitted to EPA for approval. The plans must be approved by EPA before construction can commence.
- 12. Respondent shall provide public notice in the affected area as set forth in this

Order. This public notice shall be hand delivered to each home and business served by the water system. Upon the effective date of this Order, Respondent shall comply with the public notification requirements at 40 C.F.R. § 141.201 et seq. following any future National Primary Drinking Water Regulations ("NPDWRs") violation. Respondent shall submit a copy of the public notice to EPA within 10 days of completion of the public notice, as required by 40 C.F.R. § 141.31(d). The public notice shall include the following information:

- a. All requirements as specified in 40 C.F.R. § 141.205 including:
 - A description of the violation, including the emergency situation and potential contaminants of concern, and (as applicable) the contaminant level;
 - (2) When the violation or situation occurred;
 - (3) Any potential adverse health effects from the violation or situation (see section b. below);
 - (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;
 - (5) Whether alternative water supplies should be used (see section b. below);
 - (6) What actions consumers should take, including when they should seek medical help, if known (see section b. below);

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- (7) What the system is doing to correct the violation or situation;
- (8) When the water system expects to return to compliance or resolve the situation;
- (9) The name, business address, and phone number of the water system owner, operator, or designee of the public water system as a source of additional information concerning the notice; and
- (10) A statement to encourage the notice recipients to distribute the public notice to other persons served.
- Mandatory health effects language as specified in 40 C.F.R.
 §141.205(d)(1), Appendix B to subpart Q of part 141. This language is as follows:

Birney Water System experienced a loss of pressure in the distribution system, which can cause a net movement of water from outside the pipes to the inside through cracks, breaks, or joints in the distribution system that are common in all water systems. Such a system failure carries with it a high potential that fecal contamination or other disease causing organisms could enter the distribution system.

UNTIL FURTHER NOTIFICATION, ALL WATER USED FOR DRINKING, BRUSHING TEETH, COOKING, MAKING ICE, WASHING DISHES, OR USED FOR HUMAN CONSUMPTION, ETC., SHALL BE BOILED UNTIL FURTHER NOTIFICATION FOR AT LEAST ONE (1) MINUTE, AT A ROLLING BOIL, BEFORE USE, ALL STORED WATER, DRINKS OR ICE MADE RECENTLY FROM THIS SUPPLY SHALL BE DISCARDED.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be

present. Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

- 13. Respondent shall continue the public notice as set forth in paragraph 12 above until EPA Region 8 provides written notification to discontinue public notice.
- 14. Respondent shall notify EPA as soon as practicable, but within 24 hours after learning of a violation or situation with the potential to have serious adverse effects on human health as a result of short-term exposure to contaminants, as determined in the regulations or by EPA on a case-by-case basis (40 C.F.R. §§ 141.203(b)(2) and 141.202(a)(8)). Northern Cheyenne Utilities must comply with this regulation in any future water outage event or any similar emergency situation.
- 15. All reports and notifications herein required shall be submitted to:

Barbara Burkland
U.S. Environmental Protection Agency
10 West 15th St., Suite 3200
Helena, MT 59626
FAX: (406)457-5055
Phone: (406)457-5009

GENERAL PROVISIONS

1. This Order does not constitute a waiver, suspension, or modification of the requirements of 40 C.F.R. § 141.1 et seq., or the Safe Drinking Water Act, which

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remain in full force and effect. Issuance of this Order is not an election by EPA to forgo any civil or criminal action otherwise authorized under the Act.

- Violation of any term of this Order instituted under section 1431(a) of the Act, 42 U.S.C. § 300i(a), may subject the Respondent to a civil penalty not to exceed \$16,500 for each day in which such violation occurs or failure to comply continues, assessed by an appropriate U.S. District Court under section 1431(b) of the Act, 42 U.S.C. § 300i(b).
- 3. Violation of any requirement of the SDWA or its implementing regulations instituted under section 1414(b) of the Act, 42 U.S.C. § 300g-3(b), may subject Respondent to a civil penalty of not more than \$32,500 per day of violation assessed by an appropriate U.S. District Court under section 1414(b) of the Act, 42 U.S.C. § 300g-3(b).
- The effective date of this Order shall be the date of issuance.
 Issued this 22 day of February, 2008.

John Wardell, Director

David Rock

EPA Region 8 Montana Office

David Rochlin, Acting Director Legal Enforcement Program

Office of Enforcement, Compliance and Environmental Justice