Kolman, Joe

From: North, John
Sent: Wednesday, December 18, 2013 9:00 AM
To: Kolman, Joe
Cc: Livers, Tom
Subject: FW: Administrative action By The Dept. Of Environmental Quality

Joe,

Tom and I just noticed that Tracy and Pam's letter was also directed to Mr. Earwood. Here is the Earwood letter. The Governor asked Tracy to repond.

John

From: Bruce Earwood [mailto:woodenear1@aol.com]
Sent: Thursday, February 21, 2013 11:57 PM
To: Bullock, Governor; Stone-Manning, Tracy
Cc: gmp819@yahoo.com; m_j_ent@yahoo.com; mcraig@nemontel.net; damprincess@bresnan.net; agb@nemontel.net; tina.power@ymail.com; SRoller@NEMONTEL.net; mtflyfishers@msn.com; forester@nemont.net; 2bobcat@nemontel.net; henovan1@gmail.com; shilbers@live.com; dennis@fischersfishers.com; growton@gmail.com; English, Ivie; jacki.ponti@wdc.usda.gov; john.padalino@wdc.usda.gov; Bucy, Pam; Hanson, Judy; Dilliard, Jon; mark.plank@wdc.usda.gov; ben.shuman@wdc.usda.gov; Huff, Andy; Burton, Tim; jmadden@mt.gov; jessica.zufolo@wdc.usda.gov; senatorwittich@montana.com; North, John; Pizzini, Eugene; Clark, Rachel (DEQ); Contact DOJ; scott.barringer@wdc.usda.gov
Subject: Administrative action By The Dept. Of Environmental Quality

Governor,
I demand that administrative action be taken on behalf of the residents of Fort Smith by the Dept of Environmental Quality enforcing the Uniform Plumbing Code.
The community of Fort Smith has received new drinking water system that is in violation of DEQ circular 1 and requires administrative action immediately to correct the violations followed by court injunction if needed.

The exsistance and the responsibility of the Dept Of Environmental Quality is to represent the people in enforcing codes in place to protect the health of the residents and visitors of Montana and the safety of public drinking water supplies.
It is inconceivable that DEQ would seek to align with the person or persons responsible for the violations on this new system.

Currently we (the residents of Fort Smith) are awaiting a response from DEQ regarding the documented violations and We will not except any position of DEQ other than ENFORCEMENT OF UPC as well as all codes pertaining to lead compliance on our Drinking water system

The question of if violations exist has been proven and it is documented that devices and methods of installing those devices are in violation of the Uniform Plumbing Code as written and it is imperative that the DEQ issue Administrative action immediately to force the corrections needed to bring the system into compliance.

This situation is URGENT as currently Children are drinking from this system that has violations with

devices containing Lead that are not approved for Potable water.

The effect of Lead on children has been widely documented and poses a significant risk to their development.

Therefore the State of Montana Department of Environmental Quality with the expected approval and encouragement of the Governor must issue Administrative action followed by Court Injunction if needed to expedite repairs and or corrections on the Fort Smith Drinking Water System for compliance with the Uniform Plumbing Code.

Please respond in a timely manner as this situation has been unreasonably delayed and the health of Human Beings is being jepordize because of those delays.
Act Accordingly.

Respectfully,
Bruce Earwood
Resident of Fort Smith

Kolman, Joe

From: T Donovan & J Henney <henovan1@gmail.com>
Sent: Friday, January 04, 2013 4:27 PM
To: Bucy, Pam
Cc: Opper, Richard; Dilliard, Jon; Livers, Tom; North, John; Madden, Jim; Anderson, Chad; Hanson, Judy; Pizzini, Eugene; Alheim, Larry; Clark, Rachel (DEQ); Fraser, Denver; Johnson, Perry; Waite, Matthew; Karsith@mt.gov; dfaser@mt.gov; tbofington@mt.gov; Crout, Jessica; rjost@mot.gov; dkenney@mot.gov; Thomas, Michelle; Watkins, Johnette; Gillespie, Emily; Butts, Greg; Hogenson, Brian; Jose, John; Milligan, Shari; Price III, John; Bostrom, Mark; Kelly, Keith; Kane, Jack; Cook, David; Fletcher, Keith; Lee, Rick

Ms Pam Bucy:

Congratulations on your appointment as the new Director of DEQ. Since you come from the Department of Labor and Industry, it may raise questions about DLI direct and/or indirect involvment with aspects of the "Fort Smith saga. I believe there are key questions that need to be answered. Although it is unlikely that you will provide answers to me, this communication will be forwarded to each of the State Senators, in case any of them want to ask similar questions at appropriate times.

1) Do you intend to immediately take action to replace the "cattle hydrants" in Fort Smith, not approved for potable human water and prohibited as a stop and waste valve, with approved sanitary hydrants for supply of potable water to residences?

2) Do you intend to obtain an unbiased independent consultant, recommended by IAPMO, to evaluate the safety of the water system in Fort Smith?

3) Rural Development has stated in writing, in response to complaints by residents about the safety of the Fort Smith water system, that a condition of funding was warranty that there would be compliance with applicable codes of the Unified Plumbing Code, since it was a specification. Do you intend to bring the Fort Smith water system into compliance with the Unified Plumbing Code?

4) ARM 17.38.305 prohibits cross connections on a public water system design plan for a project. The Fort Smith water plan and construction included cross connections, with no protection of the public water supply by approved backflow prevention assemblies. A condition of federal funding was that the Fort Smith project comply with all State laws. Do you intend to correct the cross connections and lack of back flow protection immediately?

5) The State of Montana adopted the Unified Plumbing Code as its own code. It is written, interpreted and taught by the International Association of Plumbing and Mechanics Organizations. The IAPMO teaches code interepretation and certifies experts. It is our understanding that at the time of DLI interpretation that the W34 stop and waste valves were not stop and waste valves, there was not a single individual in DLI who was certified as a UPC code expert within DLI. What do you intend to do about that?

6) Attempt was made by DEQ to defend the use of the hydrants on the Fort Smith projects because they were governed by trailer court codes. When that was defeated information provided from DHHS and a source within DEQ indicating that DEQ would solicit help from DLI to justify the hydrants .

a. What is your knowledge on this?

b. What was your involvement in this?

c. Describe in detail any involvement of attorneys from Great West Engineering in this process, or any involvement of other representatives of Great West Engineering in this process.

7) After this time, former Director Opper issued a letter on August 20, 2012, stating that DLI had determined that the W34 hydrants used in Fort Smith were not stop and waste valves but were "frost free outdoor faucets".

a. What was your role in this?

b. What is your knowledge of this, including all involved parties, identification of the individual responsible for this determination, and any involvement of outside party(s) such as the engineering firm or construction firm for the Fort Smith project?

8) Associated with determination that the W34 hydrants were not stop-and-waste valves, DLI also determined according to former Director Opper that formal backfow prevention protection (other than vacuum devices which are not approved for stop and waste valve protection of the public water supply) was not required.

a. What was your role in this?

b. What is your knowledge of this process, including the individuals responsible for that determination? Describe in detail

9) Approximately two months later former Director Opper reversed course and admitted that the W34 hydrants were stop and waste valves. He did not admit that the stop and waste valves were prohibited?

a. Was there ever a formal amendment to 24.301.301 (adoption of the Unified Plumbing Code by Montana) which eliminated or changed provision 603.4.19, which prohibits use of buried stop and waste valves on potable water lines?

b. What was your role in advice or determination for Mr. Opper that the stop and waste valves were not prohibited in Montana, despite 603.4.19.

c. What is your knowledge of the process, including the role of involved individuals?

10) IAPMO states that the Unified Plumbing Code mandates that if stop and waste valves are used to provide potable water to a residence, there must be permanent signing: CAUTION. NON POTABLE WATER. DO NOT DRINK.

a. Are you aware of this code provision?

b. Was such permanent signing done?

c. What is your knowledge of why IAPMO demands this?

d. What is your knowledge of why stop-and-waste valves are prohibited by the Uniform Plumbing Code?

11) Former Director Opper has stated that the stop and waste valves have no reasonable risk for residents whose potable water is supplied by these valves. Do you believe that this is correct?

12) Former Director Opper has stated that Fort Smith buried stop and waste valves had no reasonable risk of being contaminated, and therefore do not need to be replaced, because they are only 6' subsurface, and they cannot be contaminated unless they are in "ground water" which is 35' subsurface

a. Do you agree with that?

b) What was your role in making that determination

c) Describe the process in which that determination was made.

d) If you do agree with this statement, how do you explain the conflict between that statement, and the statements of the IAPMO, the American Society of Sanitary Engineering, and one of DEQ's own experts that the valves can be contaminated by contaminants carried by water from the surface leaching or infiltrating or percolating down to the level of the valves open drain hole?

e) Does the Unified Plumbing Code provide exceptions to the use of buried stop and waste valves, such as depth of "ground water?

12) Do you agree that the intent of the Board of Environmental Review is to prevent cross connections that could contaminate a public water supply?

13. Do you agree that the intent of the Board of Environmental Review is to either eliminate cross connections or make sure that the public water supply is protected from cross connections?

14. As the new Director of DEQ you will be supervising administration of ARM 17.38.305. This prohibits approval of a plan for a public water supply that contains provisions for cross connections

a) Do you intend to follow that law?

b) Do you believe that stop and waste valves are a cross connection that should not be allowed under ARM 17.38.305?

c) Do you believe that the stop and waste valve W34 hydrant installed in Fort Smith are a cross connection?

d) If your answer to b) and c) is negative, how do you explain the written statements from the IAPMO that they are cross connections?

e) Do you agree that ARM 17.38.305 mandates that if cross connections are on a design plan for a public water system, the public water supply must be protected with approved backflow prevention assemblies?

f) Did the Fort Smith public water system design include backflow prevention assemblies?

g) Did the construction of the project in Fort Smith include backflow assembly(s) to protect the public water supply?

15. Do you believe that the Fort Smith public water system design plan should not have been approved, based on mandate of ARM 17.38.305?

16. As Director of DEQ, would you approve the design plan for the Fort Smith public water system?

17. As the new Director of DEQ, do you believe it was a mistake to continue to defend approval of the design and construction of the Fort Smith public water system?

18. Tell us in detail your knowledge of why DEQ made such aggressive attempts to defend approval of the Fort Smith public water project plans and installation, rather than admit that it was a mistake.

19. The hydrant installed for supply of residential water to some homes in Fort Smith was a stop and waste valve W34 hdyrant. According to the manufacturer it is not approved for potable human water supply. IAPMO and American Society of Sanitary Engineers agree.

a. Do you believe it is proper to use this type of hydrant for supply of human potable water to residences?

b. Describe in detail your knowledge of why DEQ and DLI made such aggressive attempts to defend use of this hydrant for delivery of potable water to residences.

20. It was claimed (by DLI according to Mr. Opper) that Montana amended section 218 of the Unified Plumbing Code when it was adopted (in 24.301.301) by Montana such that building supply pipes (lines) were not included as part of the plumbing system and therefore "plumbing systems" did not have to be reviewed under the mandate of ARM 17.38.305.

a. What was your role in this?

b. Describe the process of this determination, including involved individuals.

c. Do you believe that even with the amendment, building supply lines are part of "plumbing systems" that must be reviewed on a plan for a public water system, per ARM 17.38.305?

d. Do you believe that the building supply pipe (line) and hydrants are not part of the "plumbing system" and therefore do not have to be reviewed by DEQ in the mandate of ARM 17.38.305 to review "plumbing systems"?

e. If not, how do you reconcile fact that interpretation by the Chairman of the IAPMO UPC Answers and Analysis Committee has reviewed the wording of the amended section 218 in the Montana Unified Plumbing Code, and concluded that it is consistent with that in the standard UPC: "All potable water supply and distribution pipes" in the amended section 218 includes all potable water pipes within the property lines, including the building supply pipe which is a potable water pipe?

f. Do you believe it was an error for Mr. Opper to attempt to claim that the term "plumbing systems" as defined in the Montana Unified Plumbing Code was justification for not reviewing the cross connections in the building supply pipe and hydrants?

a) Do you believe that "plumbing systems" term, as related to the mandate to review plumbing systems in ARM 17.38.305, includes building supply lines?

b) Do you believe that the building supply line and hydrants, which were on the design plan for the Fort Smith project, should have been reviewed since they included cross connections?

c) Do you believe that it was an error by DEQ to not review the cross connections on the building supply pipe and hydrants in the Fort Smith public water system design?

d) As future Director of DEQ do you intend to include building supply lines and associated hydrants and appurtenances and connections in your review of design plans for public water systems submitted for review?

21. The Chairman of the IAPMO Answer and Analysis Committee has reviewed the wording of the 2000 original amendment to section 218, the definition of "plumbing systems". He has written that the wording simply stated that the intent was to include all potable water pipes within the property line. Do you agree with that.

22. Do you believe that the approval of the Fort Smith public water design plan violated ARM 17.38.305?

23. Do you believe that the use of stop and waste valves on the plumbing system in the design plan violated both ARM 17.38.305 and the Unified Plumbing Code?

24. If your answer to 23. And 24 is affirmative, the do you believe that the approval of the design plan and construction of the Fort Smith Water public water system by DEQ violated the terms of the contract for funding from USDA Rural Development which required compliance with ALL state laws and compliance with applicable codes in the Unified Plumbing Code?

25. Do you believe that a representation that the project design and construction was consistent with all laws and applicable codes to the funding agency would be a misrepresentation?

26. If not, explain your answer.

27. If there is clear and convincing evidence that Mr. Opper made misrepresentations in September and October to Rural Development about the safety of the project and it compliance with State law and Uniform Plumbing Code, what do you intend to do about that at this time?

Very Truly,

Thomas (Tim) Donovan MD

Kolman, Joe

From: T Donovan & J Henney <henovan1@gmail.com>
Sent: Friday, January 04, 2013 4:59 PM
To: Stone-Manning, Tracy
Cc: Opper, Richard; Dilliard, Jon; Livers, Tom; North, John; Madden, Jim; Anderson, Chad; Hanson, Judy; Pizzini, Eugene; Alheim, Larry; Clark, Rachel (DEQ); Fraser, Denver; Johnson, Perry; Gillespie, Emily; Waite, Matthew; Karsith@mt.gov; dfaser@mt.gov; tbofington@mt.gov; Crout, Jessica; rjost@mot.gov; dkenney@mot.gov; Thomas, Michelle; Watkins, Johnette; Butts, Greg; Hogenson, Brian; Jose, John; Milligan, Shari; Price III, John; Bostrom, Mark; Kelly, Keith; Kane, Jack; Cook, David; Fletcher, Keith; Lee, Rick

Ms Pam Bucy:

Congratulations on your appointment as the new Director of DEQ. I believe there are key questions that need to be answered with regard to your future work . Although it is unlikely that you will provide answers to me, this communication will be forwarded to each of the State Senators, in case any of them want to ask similar questions. Questions regarding the Fort Smith public water project have also been submitted to Ms Bucy.

1) Do you intend to immediately take action to replace the "cattle hydrants" in Fort Smith, not approved for potable human water and prohibited as a stop and waste valve, with approved sanitary hydrants for supply of potable water to residences?

2) Do you intend to obtain an unbiased independent consultant, recommended by IAPMO, to evaluate the safety of the water system in Fort Smith?

3) Rural Development has stated in writing, in response to complaints by residents about the safety of the Fort Smith water system, that a condition of funding was warranty that there would be compliance with applicable codes of the Unified Plumbing Code, since it was a specification. Do you intend to bring the Fort Smith water system into compliance with the Unified Plumbing Code?

4) ARM 17.38.305 prohibits cross connections on a public water system design plan for a project. The Fort Smith water plan and construction included cross connections, with no protection of the public water supply by approved backflow prevention assemblies. A condition of federal funding was that the Fort Smith project comply with all State laws. Do you intend to correct the cross connections and lack of back flow protection immediately?

5) The State of Montana adopted the Unified Plumbing Code as its own code. It is written, interpreted and taught by the International Association of Plumbing and Mechanics Organizations. The IAPMO teaches code interepretation and certifies experts. It is our understanding that at the time of DLI interpretation that the W34 stop and waste valves were not stop and waste valves, there was not a single individual in DEQ or DLI who was certified as a UPC code expert. What do you intend to do about that?

6) After this time, former Director Opper issued a letter on August 20, 2012, stating that DLI had determined that the W34 hydrants used in Fort Smith were not stop and waste valves but were "frost free outdoor faucets".

a) Do you believe the W34 hydrants are stop and waste valves?

b) Do you believe that they are prohibited?

7) Approximately two months later former Director Opper reversed course and admitted that the W34 hydrants were stop and waste valves. He did not admit that the stop and waste valves were prohibited?

a. Was there ever a formal amendment to 24.301.301 (adoption of the Unified Plumbing Code by Montana) which eliminated or changed provision 603.4.19, which prohibits use of buried stop and waste valves on potable water lines?

8) Former Director Opper has stated that the stop and waste valves have no reasonable risk for residents whose potable water is supplied by these valves. Do you believe that this is correct?

9) Former Director Opper has stated that Fort Smith buried stop and waste valves had no reasonable risk of being contaminated, and therefore do not need to be replaced, because they are only 6' subsurface, and they cannot be contaminated unless they are in "ground water" which is 35' subsurface

a. Do you agree with that?

c) If you do agree with this statement, how do you explain the conflict between that statement, and the statements of the IAPMO, the American Society of Sanitary Engineering, and one of DEQ's own experts that the valves can be contaminated by contaminants carried by water from the surface leaching or infiltrating or percolating down to the level of the valves open drain hole?

e) Does the Unified Plumbing Code provide exceptions to the use of buried stop and waste valves in a plumbing system, such as depth of "ground water, that DEQ would be reviewing under ARM 17.38.305?

10)Do you agree that the intent of the Board of Environmental Review is to prevent cross connections that could contaminate a public water supply?

11) Do you agree that the intent of the Board of Environmental Review is to either eliminate cross connections or make sure that the public water supply is protected from cross connections?

12) As the new Director of DEQ you will be supervising administration of ARM 17.38.305. This prohibits approval of a plan for a public water supply that contains provisions for cross connections

a) Do you intend to follow that law?

b) Do you believe that stop and waste valves are a cross connection that should not be allowed under ARM 17.38.305?

c) Do you believe that the stop and waste valve W34 hydrant installed in Fort Smith are a cross connection?

d) If your answer to b) and c) is negative, how do you explain the written statements from the IAPMO that they are cross connections?

e) Do you agree that ARM 17.38.305 mandates that if cross connections are on a design plan for a public water system, the public water supply must be protected with approved backflow prevention assemblies?

f) Did the Fort Smith public water system design include backflow prevention assemblies?

g) Did the construction of the project in Fort Smith include backflow assembly(s) to protect the public water supply?

13) Do you believe that the e Fort Smith public water system design plan should not have been approved if it had provisions for stop and waste valves on it, based on mandate of ARM 17.38.305?

14) As Director of DEQ, would you approve the design plan for the Fort Smith public water system, knowing that it had stop and waste valves in the "plumbing system"?

15) As the new Director of DEQ, do you believe it was a mistake to continue to defend approval of the design and construction of the Fort Smith public water system, if that design and construction included stop and waste valves that are considered cross connections?

16) The hydrant installed for supply of residential water to some homes in Fort Smith was a stop and waste valve W34 hdyrant. According to the manufacturer it is not approved for potable human water supply. IAPMO and American Society of Sanitary Engineers agree.

a. Do you believe it is proper to use this type of hydrant for supply of human potable water to residences?

b. Would you re-approve a plan including such valves/hydrants for residential supply after it was challenged by experts?

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17). It was claimed (by DLI according to Mr. Opper) that Montana amended section 218 of the Unified Plumbing Code when it was adopted (in 24.301.301) by Montana such that building supply pipes (lines) were not included as part of

the plumbing system and therefore "plumbing systems" did not have to be reviewed under the mandate of ARM 17.38.305.

a. Do you believe that the building supply pipe (line) and hydrants are not part of the "plumbing system" and therefore do not have to be reviewed by DEQ in the mandate of ARM 17.38.305 to review "plumbing systems"?

b. If not, how do you reconcile fact that interpretation by the Chairman of the IAPMO UPC Answers and Analysis Committee has reviewed the wording of the amended section 218 in the Montana Unified Plumbing Code, and concluded that it is consistent with that in the standard UPC: "All potable water supply and distribution pipes" in the amended section 218 includes all potable water pipes within the property lines, including the building supply pipe which is a potable water pipe?

c. Do you believe it was an error for Mr. Opper to attempt to claim that the term "plumbing systems" as defined in the Montana Unified Plumbing Code was justification for not reviewing the cross connections in the building supply pipe and hydrants?

a) Do you believe that "plumbing systems" term, as related to the mandate to review plumbing systems in ARM 17.38.305, includes building supply lines?

b) Do you believe that the building supply line and hydrants, which were on the design plan for the Fort Smith project, should have been reviewed since they included cross connections?

c) Do you believe that it was an error by DEQ to not review the cross connections on the building supply pipe and hydrants in the Fort Smith public water system design?

d) As future Director of DEQ do you intend to include building supply lines and associated hydrants and appurtenances and connections in your review of design plans for public water systems submitted for review?

18)The Chairman of the IAPMO Answer and Analysis Committee has reviewed the wording of the original amendment to section 218, the definition of "plumbing systems". He has written that the wording simply stated that the intent was to include all potable water pipes within the property line. Do you agree with that.

19)Do you believe that the approval of the Fort Smith public water design plan violated ARM 17.38.305?

20)Do you believe that the use of stop and waste valves on the plumbing system in the design plan violated both ARM 17.38.305?

21)If your answer to 23. And 24 is affirmative, the do you believe that the approval of the design plan and construction of the Fort Smith Water public water system by DEQ violated the terms of the contract for funding from USDA Rural Development which required compliance with ALL state laws and compliance with applicable codes in the Unified Plumbing Code?

22)Do you believe that a representation to the funding agency that the project design and construction was consistent with all laws and applicable codes (per terms of the funding contract) would be a misrepresentation?

23 If so, what would you do about it at this time?

Very Truly,

Thomas (Tim) Donovan

Montana Department of
LABOR & INDUSTRY

Governor Steve Bullock
Commissioner Pam Bucy

Commissioner's Office

February 28, 2013

Dr. Donovan and Mr. Earwood:

The Departments of Labor and Industry and Environmental Quality have received and reviewed the materials you have submitted. At the outset, it is important to clarify each agency's role in this matter.

Department of Environmental Quality

Under the public water supply statutes, DEQ has authority to review plans and specifications for and to regulate a public water supply system. This includes the water source, water treatment plant and piping, water storage facility, and water mains. It does not include the building supply lines because those lines are owned by the building owner rather than by the public water supply. This interpretation is consistent with the definition of "public water supply system" found in the federal Safe Drinking Water Act, under which DEQ has primacy to regulate public water supplies in Montana.

Although DEQ does not have the authority to regulate building supply lines directly, it does have limited authority over them indirectly. DEQ has authority to protect the safety of the public water supply by protecting it from cross-connections between public water supplies and potential sources of contamination. However, DEQ continues to maintain that such contamination is not reasonably possible at Fort Smith. At Fort Smith the groundwater is 35 feet below the ground surface, the soils are permeable, the subdivision is on a central sewer with treatment facilities a sufficient distance away, and the valves are encased in two cubic feet of gravel.

Department of Labor and Industry (DLI)

Since its inception, the plumbing program has only applied to building structures. When the national Uniform Plumbing Code expanded its definitions in 1997 to include building supply, the DLI did not adopt that change when it adopted the national Uniform Plumbing Code for use in Montana. Specifically, the language was modified to make clear that the DLI does not exercise authority over the building supply. Administrative Rule of Montana 24.301.301(1)(g) states that Section 218 of the Uniform Plumbing Code, Definition of Plumbing System, is amended to delete the defined term "building supply."

The piping and fixtures you speak of in your emails are part of the building supply system and as such the DLI has not adopted the provisions of the UPC for application. Because Montana's plumbing code does not apply to building supply, no outstanding compliance issue exists with the installation by DLI.
The DLI did not require project application, did not review plans, and did not inspect the work simply because the DLI does not have the jurisdictional authority to do so. Our involvement has been much overstated in your writings, you have cited conclusions we have not made and you have called into question the competencies and character of employees who have no reason, and thus no opportunity, to evaluate this water main project.

Both the DEQ and the DLI are aware that this situation has highlighted the fact that no state agency has specific requirements for the section of the plumbing connection in question. As noted above, that status has been in place since the inception of the program. However, DLI will now begin to study the feasibility of adopting a code for application to the building supply lines. That undertaking will require input from all interested stakeholders across the state.

Pam Bucy

Commissioner Pam Bucy

Montana Department of Labor & Industry

Director Tracy Stone-Manning

Montana Department of Environmental Quality

Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

October 15, 2012

Mr. Dennis Fischer, Chairman
Fort Smith Water and Sewer District
P.O. Box 7596
Fort Smith, MT 59035

Dear Mr. Fischer:

You have requested that this agency perform a formal inquiry into whether the Fort Smith system meets the Department of Environmental Quality's (DEQ) requirements. I have completed my internal inquiry. That inquiry included a determination of the meaning and applicability of the Uniform Plumbing Code (UPC), both as adopted by the American National Standards Institute (ANSI) and as modified and adopted by the Department of Labor and Industry as the state plumbing code, a review of DEQ's authority under the public water supply act, and a review of the safety of the Woodford W34 hydrant installed at Fort Smith.

My conclusions are as follows:

1. The Woodford W34 hydrants are stop and waste valves subject to §603.4.10 of the UPC as adopted by ANSI and as adopted by the Department of Labor and Industry.

2. Under §101.4 of the UPC, as adopted by ANSI and the Department of Labor and Industry, the UPC applies to the erection, installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of "plumbing systems."

3. Under §101.4 of the UPC, as adopted by ANSI, the term "plumbing system" includes the "building supply pipe," which is defined as "the pipe carrying potable water from the water meter or other source of water supply to a building or other point of use or distribution on the lot."

4. Under §101.4 of the UPC, as adopted by the Department of Labor and Industry, the term "plumbing system" does not include building supply lines. Therefore, the state plumbing code does not apply to building supply lines.

5. Under the public water supply statutes, DEQ has authority to review plans and specifications for and to regulate a "public water supply system," which is defined as "a system for the provision of water for human consumption . . . that has at least 15 service connections or that regularly services at least 25 persons daily for any 60 or more days in a calendar year."

6. DEQ has historically interpreted the public water supply to include the water source, water treatment plant supply piping, water treatment plant, water storage facility, and water mains. It has not interpreted the term to apply to building supply lines because those lines are owned by the building owner rather than the public water supply. This interpretation is consistent with the definition of "public water supply system" found in the federal Safe Drinking Water Act, under

which DEQ has primacy to regulate public water supplies in Montana. The definition in the Safe Drinking Water Act contains the 15 connection/25 person criteria and provides that these systems include "any collection, treatment, storage, and distribution facilities under control of the operator of such system . . ."

7. Although the plans and specifications submitted for the Fort Smith system included the design of the building supply lines and hydrant, DEQ's review did not encompass the building supply line and hydrant design because the building supply line is not part of the public water supply system under the public water supply statutes.

8. Although DEQ does not have the authority to regulate building supply lines directly, it does have authority over them indirectly. DEQ has authority to protect the safety of the public water supply by regulating cross-connections between public water supplies and potential sources of contamination. See ARM 17.38.305. A cross-connection is defined as "a connection between a public water supply system and . . . potential source of contamination so that a flow of water into or contamination of the public water supply system from the other source of water or contamination is possible."

9. Contamination of the public water supply system is not reasonably possible at Fort Smith. Cross-contamination would be reasonably possible if the groundwater at Fort Smith were above or near the level of the valves, if soils in the area were not permeable, or if there were drain fields nearby. At Fort Smith the ground water is 35 feet below the ground surface, the soils are permeable, and the subdivision is on a central sewer with treatment facilities a sufficient distance away. Furthermore, the valves are encased in two cubic feet of gravel. Even if the valves were located in ground water, cross-contamination of the public water supply could occur only in a situation where the public water supply system loses pressure and siphons the ground water into the public system. Thus, in this situation, DEQ's engineers have determined that there is no reasonable possibility of cross-contamination of the public water system. In addition, these valves have been installed in many building supply lines across the state, and DEQ is not aware of a single instance of backflow into a public water supply system resulting from their use.

10. Aside from the issue of cross-contamination of the public water supply, and because of the factors listed in 9 above, there is not a reasonable possibility of contamination of potable water in an individual system from the hydrants that provide water to the homes. There is a very slight risk of contamination of water in yard hydrants should the hose be left in a contamination source, causing siphoning into the hydrant. The contamination would occur only if the yard hydrant were turned on before siphoning is complete. This risk could be eliminated by installation of vacuum breakers on the yard hydrants.

11. Section 8.11.1 of Circular DEQ-1, which has been incorporated into DEQ's public water supply rules, provides: "Water services and plumbing must conform to relevant local and state plumbing codes, or to the Uniform Plumbing Code, as amended by ARM 8.70.302." Most of the language in Circular DEQ-1, including the language quoted above, was adopted essentially verbatim from the Recommended Standards for Water Works of the Great Lakes-Upper Missouri River Board of State and Provincial Public Health and Environmental Managers. As is

acknowledged in that document, the standards were prepared without consideration to legal authorities of the various states. This language therefore must be interpreted consistent with DEQ's regulatory authority. It cannot be read to apply to service lines and plumbing over which DEQ does not have authority.

Given these findings, I have determined that DEQ will not require replacement of the valves at the Fort Smith water system. I simply cannot justify the expenditure of public funds when the expenditure will not provide any public health benefit or is outside the agency's authority.

Several persons from Fort Smith have requested that DEQ request an independent investigation by the entity that adopts the UPC. We know that this investigation would result in a finding that the Woodford W34 hydrants do not meet the UPC before amendment by the Department of Labor and Industry. More relevant here are the site-specific conditions at Fort Smith and Montana law. For the reasons detailed above, public health is not threatened at Fort Smith and I will not request an independent investigation.

I assure you that I have not taken this matter lightly. When we were informed of the incidence of diarrhea at Fort Smith, we immediately sampled the water to determine its safety. The water tested safe. The Department of Health and Human Services coordinated with Bighorn County Health Department to conduct an investigation to determine how many people were ill and potential causes of the illness. Interviews with ill persons were conducted and there were several other risks elicited, including recreational water use and food preparation by a possibly ill person that may have contributed to the small cluster of illnesses. The initial complainant has not cooperated with further investigation and subsequent checks conducted by the Bighorn County Public Health Department have failed to identify any additional cases. I have also thoroughly discussed the matter of the safety of the valves with my public health and engineering staff.

Please feel free to contact me with any questions or concerns.

Sincerely,

Richard H. Opper
Director