



U.S. OFFICE OF SPECIAL COUNSEL

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The Special Counsel

March 27, 2015

The President
The White House
Washington, D.C. 20510

Re: OSC File No. DI-13-4538

Dear Mr. President:

Pursuant to my duties as Special Counsel, enclosed please find the Department of Veterans Affairs' (VA) investigative reports, based on disclosures of wrongdoing at the Grand Junction VA Medical Center (Grand Junction VAMC), Grand Junction, Colorado, made to the Office of Special Counsel (OSC). OSC has reviewed the reports and, in accordance with 5 U.S.C. § 1213(e), provides the following summary of the allegations and our findings.

The whistleblower, Bartholomew Newton, a former industrial controls technician, disclosed that Grand Junction VAMC management failed to properly address unsafe conditions within the facility that posed health and safety hazards to patients and staff, including the failure to conduct proper testing, eradication, and maintenance to prevent and eliminate *Legionella* bacteria from the facility's water system.

The investigation substantiated that environmental testing detected *Legionella* in Grand Junction VAMC's water system in February 2013, and despite initiating eradication efforts in March 2013, the facility did not conduct *Legionella* eradication procedures in compliance with VA requirements until October 2013. The VA concluded that Grand Junction VAMC did not fully address unsafe conditions that could potentially pose health and safety hazards to patients and staff. However, because the investigation did not reveal any evidence of clinical consequences resulting from the presence of *Legionella* in the water system, the VA concluded there was not a substantial and specific danger to public health or safety.

In response to the findings, Grand Junction VAMC has taken multiple corrective actions to resolve the problems identified. I have determined that the VA's reports meet all of the statutory requirements. However, in light of the findings, I do not find reasonable the VA's conclusion that there was no substantial and specific danger to public health or safety.

On September 25, 2013, OSC referred Mr. Newton's allegations to then-Secretary of Veterans Affairs Eric K. Shinseki to conduct an investigation pursuant to 5 U.S.C. § 1213(c)

The President
March 27, 2015
Page 2 of 6

and (d). Secretary Shinseki tasked then-Under Secretary for Health Robert A. Petzel with the investigation in this matter, who in turn directed the Office of the Medical Inspector (OMI) to conduct the investigation. OSC received the VA's investigative report on February 3, 2014. In response to OSC's request, the agency provided a supplemental report on October 7, 2014. Mr. Newton declined to provide comments on the agency reports. As required by 5 U.S.C. § 1213(e)(3), I am now transmitting the agency reports to you.¹

I. The Whistleblower's Disclosures

Legionella Testing

Mr. Newton explained that Grand Junction VAMC did not conduct routine testing for the presence of *Legionella* in the water system. This system provides water to fountains, bathrooms, cafeterias, kitchens, and patient rooms within the facility. According to Mr. Newton, when testing began in February 2013, results indicated the presence of *Legionella* in the system. Mr. Newton was aware of these positive test results through correspondence and emails regarding the testing and the need to commence *Legionella* eradication procedures at the facility. Additionally, he had access to building computer systems, which indicated that conditions sufficient for bacterial growth existed within the plumbing network at the facility.

Legionella Eradication Procedures

According to Mr. Newton, when management became aware of the problem in February 2013, they directed that procedures be conducted to eradicate the *Legionella*. However, these procedures were not performed until April 2013 and were limited to conducting a heat-and-flush process that was not conducted correctly.

In response to an outbreak of Legionnaires' disease caused by a contaminated water system at the Pittsburgh VA, which was associated with at least five fatalities, the Centers for Disease Control and Prevention (CDC) made a series of recommendations related to proper methods for eradicating *Legionella*. These recommendations included a heat-and-flush procedure that requires flushing a water system and all of the fixtures throughout affected facilities with water heated to 160-170 degrees for at least ten minutes. The CDC also recommended that following the heat-and-flush process, a hyper-chlorination procedure should be conducted. For this process, bleach should be injected into the water system, then

¹ The Office of Special Counsel (OSC) is authorized by law to receive disclosures of information from federal employees alleging violations of law, rule, or regulation, gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health and safety. 5 U.S.C. § 1213(a) and (b). OSC does not have the authority to investigate a whistleblower's disclosure; rather, if the Special Counsel determines that there is a substantial likelihood that one of the aforementioned conditions exists, she is required to advise the appropriate agency head of her determination, and the agency head is required to conduct an investigation of the allegations and submit a written report. 5 U.S.C. § 1213(c) and (g). Upon receipt, the Special Counsel reviews the agency report to determine whether it contains all of the information required by statute and that the findings of the head of the agency appear to be reasonable. 5 U.S.C. § 1213(e)(2). The Special Counsel will determine that the agency's investigative findings and conclusions appear reasonable if they are credible, consistent, and complete based upon the facts in the disclosure, the agency report, and the whistleblower's comments under 5 U.S.C. § 1213(e)(1).

The President
March 27, 2015
Page 3 of 6

flushed from all of the fixtures until a chlorine level of 10 parts per million (ppm) is achieved in both hot and cold water systems. The system is then left for 24 hours and flushed again until the chlorine level is below 2 ppm.

Mr. Newton explained that the heat-and-flush procedures initiated at Grand Junction VAMC in April 2013 were not conducted correctly to eradicate *Legionella*. First, he noted that the building computer systems showed that the water in the system was not heated to the 160-170 degree temperature range recommended by the CDC. Additionally, he explained that the heated water was not flushed through the system for sufficient time periods to eradicate the bacteria. Further, Mr. Newton described how components of the facility's plumbing system, known as end loops, indicated that segments of the network were not receiving water as part of the heat-and-flush protocol. When properly heated water is flushed through the end loops, the pipes will respond by knocking. When the heat-and-flush procedure was conducted, Mr. Newton observed that knocking did not occur in the end loops. This indicated that a large number of fixtures in the facility did not receive the heat-and-flush treatment necessary to eliminate *Legionella*. Finally, Mr. Newton explained that the facility failed to conduct the hyper-chlorination procedure recommended by the CDC following the completion of the heat-and-flush process.

Maintenance and Cleaning Procedures

Mr. Newton also explained that heat exchangers in Grand Junction VAMC's water system were not routinely cleaned. Routine maintenance of this equipment is necessary to prevent the growth of bacteria within these systems. Standard maintenance schedules indicate that these components should be removed from boilers every 30 days so that they can be cleaned and sterilized. According to Mr. Newton, the heat exchangers had not been removed and cleaned since he began working in the facility in August of 2009, and their condition supported the growth of *Legionella* within these systems.

II. The Agency's Reports

The investigation conducted by OMI substantiated that environmental testing performed in February 2013 detected *Legionella* in Grand Junction VAMC's water system, and that the facility did not conduct proper procedures to eradicate the bacteria until October 2013. According to the report, the test results indicating that eighteen percent of the samples were positive for *Legionella* were reported to the facility on March 3, 2013. On March 14, 2013, earlier than the April time frame asserted by Mr. Newton, engineering staff conducted the first heat-and-flush procedure, also known as thermal eradication, to eliminate the bacteria. OMI found, however, that the facility did not flush the system with water heated to 160-170 degrees for 30 minutes in compliance with Veterans Health Administration (VHA) Directive 2008-010, *Prevention of Legionella Disease*.² Rather, the system was flushed with water heated to only 140 degrees for twenty minutes due to concerns of potential scalding at

² VHA Directive 2008-10 has been rescinded and superseded by VHA Directive 1061, August 13, 2014.

The President
March 27, 2015
Page 4 of 6

the distal sites. Water samples taken following the initial heat-and-flush procedure still tested positive for *Legionella*.

The investigation revealed that Grand Junction VAMC had been conducting water sampling twice monthly and heat-and flush eradication procedures on a weekly basis since March 2013. OMI confirmed, however, that until October 2013, the facility never conducted the heat-and-flush procedures in full compliance with VHA Directive 2008-010. OMI found that even when the water temperature was increased to 160-170 degrees and flushing was performed for 30 minutes, facility staff were not aware that the Directive required the opening of every valve for 30 minutes. The staff opened only the valves at the most distal sites, which was not compliant with the Directive.

Further, OMI substantiated the need for additional mitigation efforts beyond the heat-and-flush thermal eradication process. OMI noted that, although hyper-chlorination is not required by the CDC guidelines or VHA Directive, the facility has areas where heat-and-flush eradication is not feasible. Thus, OMI concluded that Grand Junction VAMC should have utilized an alternative eradication method in those areas. In addition, OMI substantiated that the facility was not following all of the manufacture's recommendations for maintenance and cleaning of the semi-instantaneous water heaters. OMI noted that two of the facility's five semi-instantaneous water heaters had been out of service for repairs for several months, but that the repairs were finally completed in October 2013.

According to the reports, Grand Junction VAMC used the heat-and-flush eradication process as an interim mitigation technique until the facility could acquire a copper-silver ionization system as a long-term *Legionella* prevention and mitigation solution in compliance with the VHA Directive. The procurement process for the copper-silver ionization system was initiated in May 2013. The generators were installed in October 2013, and the facility began using the system on October 23, 2013. The supplemental report indicates that the copper-silver ionization system has reduced the percentage of *Legionella* detection rates. For the eight months prior to installation of the system, the positive detection rates averaged 50 percent, with multiple sites yielding more than 15 colony-forming units. Over the eight months following installation, the positive detection rates decreased to five percent, with less than one colony-forming unit per sample. In response to each positive detection, the facility has responded by increasing the rate of flushing lines and cleaning, rerouting, or replacing plumbing.

The report indicates that Grand Junction VAMC took other actions to address the problem, many of which had been accomplished by the time of OMI's site visit on September 30 to October 2, 2013. Specifically, the facility had ensured that all aerators were removed; cleaned all shower heads; completed monthly preventive maintenance on water heaters and thermostatic mixing valves; identified potential stagnation points in the hot water distribution system and requested funding to correct the problem; and sought funding for water tower improvements. The facility also formed a multidisciplinary Water Quality Committee that reports to the Safety Committee and communicates with the Infection Control Committee.

The President
March 27, 2015
Page 5 of 6

Despite the corrective actions taken, OMI substantiated that Grand Junction VAMC did not completely address the unsafe conditions that could potentially pose health and safety hazards to veterans and staff. Nevertheless, OMI found no evidence of clinical consequences resulting from the *Legionella* in the water system. According to the report, the facility conducted a retroactive review of all pneumonia cases since the initial reporting of positive *Legionella* test results, which did not reveal any cases of *Legionella* pneumonia. The supplemental report further explains that for this review, the records of all patients hospitalized at Grand Junction VAMC from 2000 through 2013 were screened, pulling information from several sources, to identify diagnoses potentially associated with *Legionella*. Facility staff identified and forwarded to the chief of staff and chief of medicine for review five cases of possible *Legionella*-associated illness. Only one of the five patients was determined to have had *Legionella* pneumonia, which the patient acquired in 2008 in the community rather than at Grand Junction VAMC. In addition, the infection preventionist reviewed 202 patient charts as part of the ongoing audit for infections at the facility and found only one patient who was diagnosed with community-acquired *Legionella* pneumonia in December 2013.

OMI did not substantiate that Grand Junction VAMC failed to conduct routine *Legionella* testing, nor could OMI substantiate that the computer system had indicated conditions sufficient for bacteria growth in the water system, as the temperature data for the time frame in question were no longer available. As noted, however, *Legionella* was detected in the system at that time. OMI reviewed the available temperature data collected by the computer system and found that the facility was in compliance with the standards.

In light of the findings, OMI made several recommendations for corrective action, including that Grand Junction VAMC: (1) update its *Legionella* policy with specific and feasible mitigation plans; (2) update the Medical Center Engineering Service Policy Memoranda to include procedures, parameters, and other necessary information in accordance with VHA directives and memoranda; (3) ensure that the selected *Legionella* mitigation procedure is performed in accordance with VHA directives; (4) before implementing mitigation, ensure that all involved staff understand the procedures and safety precautions, and that the training is documented; (5) consider expanding the building automation system to include temperature monitoring throughout the medical center; (6) develop preventive maintenance procedures for the semi-instantaneous water heaters in accordance with the manufacturer's requirements; and (7) ensure redundancy in the water heating system for the Community Living Center.

The supplemental report indicates that Grand Junction VAMC has completed all of the recommended actions, with the exception of the expansion of the building automation system. That project is expected to be completed by the end of April 2015. Further, while the Medical Center Engineering Service Policy Memorandum covering the heat-and-flush eradication procedures was updated as recommended by OMI, the supplemental report reflects that the facility is actively responding to recommendations made by OMI, as well as those provided in a Hazard Analysis Survey prepared by an outside consultant, taking into account more stringent standards.

The President
March 27, 2015
Page 6 of 6

III. The Special Counsel's Findings

I have reviewed the original disclosure and the agency reports. Based on that review, I have determined that the reports contain all of the information required by statute. However, I do not find reasonable the VA's conclusion that there was no substantial and specific danger to public health or safety. As noted, OMI found that Grand Junction VAMC did not conduct proper *Legionella* eradication and other necessary mitigation efforts for seven months following the detection of *Legionella* in the facility's water system. OMI concluded that Grand Junction VAMC did not completely address the unsafe conditions that could potentially pose health and safety hazards to veterans and staff. Nevertheless, because the VA found no evidence of clinical consequences resulting from the *Legionella*, it concluded there was no substantial and specific danger to public health or safety.

This conclusion reflects the "harmless error" approach often taken by the VA with respect to patient health and safety. My concerns regarding the VA's response in this and other matters were raised in a previous letter to you on June 23, 2014, which I have enclosed with this letter. My June 23 letter, which was also shared with the VA, outlines the VA's failure to acknowledge the impact of such deficiencies on the health and safety of veterans. While it appears appropriate corrective action has been taken in this matter, it is concerning that the VA appears unwilling to acknowledge that the deficiencies posed a potential danger to patients at the Grand Junction VAMC.

As required by 5 U.S.C. § 1213(e)(3), I have sent copies of the unredacted agency reports to the Chairmen and Ranking Members of the Senate and House Committees on Veterans' Affairs. I have also filed copies of the redacted agency reports in OSC's public file, which is available online at www.osc.gov.³ This matter is now closed.

Respectfully,



Carolyn N. Lerner

Enclosures

³ The VA provided OSC with reports containing employee names (enclosed), and redacted reports in which employees' names were removed. The VA has cited Exemption 6 of the Freedom of Information Act (FOIA) (5 U.S.C. § 552(b)(6)) as the basis for its redactions to the reports produced in response to 5 U.S.C. § 1213, and requested that OSC post the redacted version of the reports in our public file. OSC objects to the VA's use of FOIA to remove these names because under FOIA, such withholding of information is discretionary, not mandatory, and therefore does not fit within the exceptions to disclosure under 5 U.S.C. § 1219(b), but has agreed to post the redacted version of the reports as an accommodation.