CERTIFICATION OF WORK
SERVICE CALL

(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID/Building: NY010 Date of Visit: 10/21/2024

Contractor Personnel on Site:

1. Brian Pickett
2. Michael Hileman
3. Rosie Maloney
4. Mark Maloney
5.
6.

Service Call Number

CSS# 2897148 WO# 17045

Description of Repairs

Please see report attached and pictures in the report.

CERTIFICATION OF WORK

To be signed by the Contractor:

Print Name: Brian Pickett Date: 10/24/2024

Signed: Brian Pickett

To be signed by Facility Manager:

By signing the Certification of Work, the said government representative signature does not constitute acceptance of any work performed by the contractor, it only acknowledges that the contractor was on-site during the identified timeline:

Print Name/Rank: Chanel Stasio Date: 10/28/2024

Signed: Chanel Stasio

E-Mail: chanel.m.stasio.ctr@army.mil

October 24, 2024

IWC Innovations
Brian Pickett, Vice President
704 S. State Rd. 135, Ste D348
Greenwood, IN 46143

Amhurst USARC
100 North Forest Road
Buffalo, NY 14221

Ref: Remediation/Sanitization Report for Amhurst USARC - Buffalo, NY

Dear Julie,

Please find attached the sanitization report for Amhurst USARC.

If you have any questions or concerns, please feel free to contact me.

Regards,

Brian Pickett

Brian Pickett
Vice President, Environmental Solutions
ASSE 12080 Certified Legionella Specialist

Remediation / Sanitization Report for Amhurst USARC – Buffalo, NY

October 21, 2024: IWC conducted a remediation (sanitization) of the potable water system at Amhurst USARC - Buffalo, NY. A sanitization process was completed to remediate, clean and sanitize the facility (building) potable water piping system(s). The sanitization was performed as an acute remedial treatment.

1. On October 21, 2024, 1:50 PM, IWC personnel arrived onsite with their Remediation Specialists (Brian Pickett, Michael Hileman, Rosie Maloney and Mark Maloney). A preliminary meeting was held to recap the pre-planning remediation procedures and address any concerns. After conclusion, IWC met with the Amhurst USARC Facility staff and outlined the full procedure.

2. After verifying that all preparations were completed. IWC personnel began setting up the sanitization injection assemblies and installation to the facility incoming water line.

3. Upon arrival at the facility, IWC had the maintenance personnel at Amhurst USARC to turn off the hot water heater and start draining the tank.

4. At 2:15 PM, after verifying the disconnection of all pertinent equipment were removed from the water supply so as not to damage any filters or other sensitive system components with the high levels of sanitization chlorine chemistry, the HydroTreat™ Process began with the injection of sodium hypochlorite and chlorine dioxide and HydroTreat™ via high-pressure pumps directly into the main incoming water line installed tap. IWC identified the farthest (distal) taps from the injection point and were subsequently monitored to ensure that the HydroTreat™ Process chemicals had reached throughout the facility water system headers and risers. The taps were repeatedly tested until minimum recommended levels of hyper-chlorination (chlorine residual) of >200 ppm was reached.

5. Once the desired chlorine readings for the HydroTreat™ Process were reached in all taps in both the hot and cold-water supplies (~3:00 PM), the sanitizer pumps were turned down to minimal, along with the main tap in the building that had been left on to draw the HydroTreat™ Process solutions into the piping. (**Note**: as this is done, pressure readings at the pressure gauge on the building supply line are observed and no pressure loss was found.) On-site personnel were notified that the desired treatment levels had been reached and that they would now be maintained and left in the building water systems for a minimum three-hour holding time to continue the cleaning and remediation process consistent with AWWA Standard sanitization protocol specifications. This started at ~ 3:00 PM.

6. On October 21, 2024, 6:10 PM the IWC team began a flushing procedure for the potable water system. All distal taps were methodically and procedurally addressed with a draining, flushing, and testing regimen to ensure that the treatment residual chlorine levels had been restored to normal and safe levels of < 2 ppm free chlorine. Every water tap (outlet) was subsequently flushed (hot and cold).

7. The free chlorine levels were all below 2 ppm in all taps, systems and equipment at around October 21, 2024, 7:10 PM, and the system/s were returned to service use.

8. A meeting was convened with facility management to discuss the conclusion of the remediation (sanitization) and steps going forward with continued flushing of all building potable water fixtures post sanitization – including the post sanitization Legionella sampling requirements. IWC left the facility around October 21, 2024, 7:20 PM.

Conclusions / Recommendations Following Remediation Sanitization

IWC conducted a Legionella remediation per established protocols.

Remediation sanitizations simply clean and hopefully clear the system of any waterborne pathogens when completed successfully. The conditions, including operations, that allowed Legionella to establish within the water system in the first place, MUST be addressed and controlled per a water management program (plan) – in accordance with the ASHRAE Standard 188 and CDC Toolkit guidelines.

Constant care and monitoring are important, and why IWC generally recommends the following:

1. IWC recommends that the building water system be periodically tested for Legionella to validate the successful implementation of a water management program (plan) for the control of Legionella.

   Quarterly testing is generally recommended after a remediation sanitization. Water sample testing should include hot water tanks with a first draw sample and a flushed sample; hot water returns from recirculating systems; samples from ice machines and a variety of faucets and showers outlets representative of the whole facility layout (near and distal outlets from the incoming water supply on every floor and wing). Facility testing should include measuring disinfectant (i.e., chlorine) levels, as well as measuring hot water temperatures at 30 and 60 second intervals to verify how hot the temperatures get and how quickly (**or not**) they are achieved.

2. IWC also recommends removing as many dead legs within the facility as possible and consulting a plumbing firm with appropriate expertise and experience for this endeavor. *NOTE: Dead legs should be noted during any remodeling or construction as not all dead legs will be visible due to being hidden in ceilings or walls.*

3. Regular flushing (3-5 minutes in length) of vacant units and other areas where there are infrequently used sinks should be flushed on a weekly basis per your Water Management Plan Program and in the case that these areas are high risk then they should be flushed twice weekly if the unit contains highly immune compromised individuals.

4. The hot water heater should be set to a minimum of 140°F and a mixing valve added to down mix to the appropriate temperature that the facility deems necessary. Additionally, a recirculating loop would help to maintain hot water throughout the hot water system.

It is certainly our strong recommendation that the Amhurst USARC follows the compliance elements (Section 4) of ASHRAE Standard 188 and the CDC Toolkit and carefully executes and maintains a water management plan (WMP) to control Legionella in your building waters system(s) and help manage the risk of legionellosis.

Water after Treatment

Water during Treatment