# About ODW & Cyber Threats to Drinking Water

Jessica Coughlin, BS, VaPEM, NRP
Emergency Services Coordinator
Virginia Department of Health – Office of Drinking Water

VIRGINIA
DEPARTMENT
OF HEALTH

Recent Cyber Threats to Drinking Water

"**Pro-Russia hacktivist** activity against these sectors appears mostly limited to unsophisticated techniques that manipulate ICS (industrial control systems) equipment to create nuisance effects. However, investigations have identified that these actors are capable of techniques that pose physical threats against insecure and misconfigured OT (operation technology) environments (CISA, 2024)."
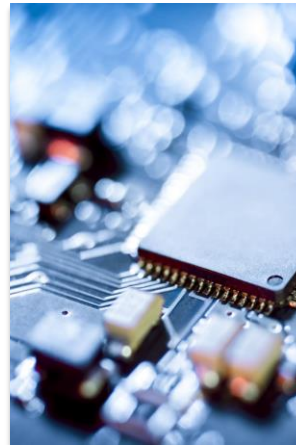
"**Iranian Government Islamic Revolutionary Guard Corps** carried out malicious cyberattacks against a number of critical infrastructure organizations, including drinking water systems. They were able to do this by targeting and disabling Unitronics Programmable Logic Controllers, a widely used piece of operational technology, because the facility had failed to change a default manufacturer password (Forbes, 2024).

ODW & Cybersecurity

March 18, 2024, letter from Environmental Protection Agency (EPA) Administrator Michael Regan and Assistant to the President for National Security Affairs Jake Sullivan to all governors addressed the significant threat posed by cybersecurity vulnerabilities at drinking water and wastewater facilities.

VDH ODW is responding via Commissioner Shelton with the following information included:

| 1. Education and Outreach | 2. Assessments for Readiness | 3. Policy and Regulation updates | 4. Active engagement with other state partners (VDEM, VFC, DEQ) |

VDH VIRGINIA DEPARTMENT OF HEALTH

1. Education and Outreach

Hosted a webinar with EPA on January 31, 2024, for water utilities with speakers from CISA, FBI and VFC

Updated website with guidance on cybersecurity assessments and EPA's free assessments

Presentations to multiple water associations

Partnership with Virginia Tech for "Water Quality: Broadcast Series" which offers education and continuing education to water operators

Follow-up to 2023 survey to further assess cyber readiness

Annual outreach to assess readiness after survey

2. Assess Cybersecurity Readiness

Survey in 2023, but will update survey in conjunction with VFC, VDEM, all partners to ask questions regarding operational technology, cybersecurity assessments done, when they plan to reassess.

Based on survey results we will conduct targeted outreach and request the waterworks establish a plan, schedule, and method to conduct cybersecurity assessments.

3. Policy and Regulation

With the passage of HB220 (2024 Acts of Assembly, Chapter 178), starting on July 1, waterworks can satisfy their operator attendance requirement through remote monitoring. VDH is developing policies and procedures to consider applications for approval of remote monitoring plans.

Remote operation of a waterworks may increase a waterworks' potential vulnerability to cyberattacks. Consequently, VDH plans to require that an acceptable remote monitoring plan include a cybersecurity assessment and development of a risk mitigation and response plan prior to starting remote monitoring.

4. Active Engagement with State Partners

VDH ODW is actively engaged with the VFC, VDEM, DEQ and other partners

- VFC is actively working on 3 projects with us including webinars, documents, and other resources for the water utilities that will be coming out in June.
  - Thank you, Chris Cruz!
- VDH ODW is actively engaged with several VDEM Critical Infrastructure projects they are working on.

QUESTIONS??

Jessica Coughlin
Emergency Services Coordinator
Office of Drinking Water
Virginia Department of Health
Cell: (804) 340-9759
Jessica.Coughlin@vdh.virginia.gov