

Review of NJIT's Drinking Water Sampling and Mitigation Protocol

In March 2016, the City of Newark announced that the New Jersey Department of Environmental Protection (NJDEP) found elevated levels of lead at thirty of the City's public schools. In an effort to ensure safe drinking water for the university community, NJIT initiated a campus-wide drinking water sampling and mitigation program. This program has been a collaborative effort between the Facilities Services Department and the Environmental Health and Safety Department, both units of Real Estate Development and Capital Operations (REDCO). To date, more than 240 water samples have been collected from NJIT buildings.

The initial group of buildings selected for sampling included all of NJIT's residence halls and older buildings that may have been built or renovated prior to lead standards changing for use in building materials. Initial sampling focused on drinking fountains and kitchen faucets. Once collected, samples were analyzed by a laboratory certified by the NJ Department of Environmental Protection (DEP) for drinking water analysis.

The initial batch of water samples were collected from 16 occupied NJIT buildings. Results from the initial samples returned results higher than the EPA Action Level of 15 micrograms per liter (or 15 parts per billion) in six of the buildings sampled. In response to these results, NJIT initiated an Interim Control Plan that includes the following measures:

- Remove from service all drinking fountains and plumbing fixtures from buildings where sample analysis returned follow up results higher than the US EPA/NJ DEP Action Level.
- Provide alternative source of drinking water in the form of bottled water for buildings where drinking fountains and kitchen plumbing fixtures were removed from service.
- Post signs in locations where sample analysis returned results higher than the US EPA/NJ DEP Action Level indicating that water at this location should not be used for drinking or cooking.

Following these initial measures, NJIT embarked on a more robust sampling protocol continuing to focus on drinking fountains and kitchen sinks. As more samples were collected and analyzed, NJIT Facilities Services and EHS personnel gained a more thorough understanding of what specific plumbing components were potentially problematic. This led to the initiation of a Drinking Water Mitigation Plan that focused on the following remediation activities:

- Accelerate the replacement of problematic plumbing fixtures focusing on drinking fountains and sink faucets in food preparation areas.
- Installing point of use water filtration devices, certified for the removal of lead from drinking water, in locations where they may be most effective.
- Collecting and analyzing additional samples following the repair or replacement of each plumbing fixture to validate by laboratory analysis the success of the mitigation activities.

Currently, NJIT continues to sample drinking water on a campus-wide basis. Having settled on a repair and replacement strategy for drinking fountains and food preparation sinks, NJIT has expanded its efforts to include the examination of lavatory sinks in NJIT residence halls. These

efforts are ongoing. Throughout each phase of the drinking water sampling protocol, NJIT has adhered to a policy of open and transparent communication with the University community. All sampling results have been posted on the EHS website. Of the 244 samples collected to date, 49 have returned results higher than the EPA Action Level. To date the NJIT Facilities Services Department has repaired successfully 22 food preparation sinks and 9 drinking fountains by removing and replacing problematic components. Additionally, 6 new drinking fountains have been installed in NJIT buildings with additional fountains on order and scheduled for installation. Also, 16 water filtration systems, certified for the removal of lead, have been installed in selected locations and 10 new lead-free back flow prevention devices have been installed as required by sampling results.

NJIT will continue to provide transparent communication of our lead mitigation efforts. While not mandated to test or perform mitigation activities, the leadership of NJIT understands the importance of the health and wellbeing of our students, faculty, and staff. We will continue the mitigation efforts and provide future updates to the campus community when appropriate. Additional information concerning NJIT's drinking water mitigation activities may be found here: <https://www5.njit.edu/environmentalsafety/drinking-water-testing/>

Should you have any questions, please contact any of the following individuals:

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We appreciate your patience and understanding as we work to improve our University!