



CITY OF CONCORD

New Hampshire's Main Street™

INFORMATIONAL REPORT TO MAYOR AND THE CITY COUNCIL

FROM: Earle M. Chesley P.E., General Services Director

DATE: November 21, 2023

SUBJECT: Hall Street Wastewater Plant Sludge Lime Stabilization Equipment
Decommission and Removal

Recommendation

Accept this report for information.

Background

In 2003, the Wastewater Division installed a wastewater sludge lime stabilization system (RDP system) for the purpose of processing wastewater sludge into a beneficially reusable fertilizer product. The wastewater facility produced a Class A biosolid material through the RDP system for approximately 17 years.

In 2018, the wastewater industry identified the emergence of per- and polyfluoroalkyl substances (PFAS) as a potential concern within wastewater including its processed byproducts. The city has monitored the evolving science regarding the fate and transport of PFAS from wastewater, and the developing regulatory environment associated with PFAS since its emergence.

In March 2020, based on the available data and the regulatory environment, the city discontinued the production and distribution of Class A biosolids and its subsequent land application. At that time, General Services staff placed the RDP equipment out of service and continued to perform annual maintenance on the equipment. The science related to PFAS has continued to evolve and concludes these compounds are ubiquitous throughout our current environment. Consequently, these materials will continue to aggregate in our wastewater influent and pass into the plant's residual byproducts for the reasonable future. Stricter regulation of wastewater residuals will likely develop.

Discussion

Given these facts, it is highly unlikely the City will return to the lime stabilization system to process wastewater sludge since it does not generate temperatures that significantly reduce PFAS concentrations. The process generates only sufficient heat to significantly reduce pathogenic bacteria. The space presently occupied by the RDP equipment should be more effectively utilized for necessary ongoing capital refurbishments at the Hall Street Wastewater Facility instead of storing obsolete process equipment. Consequently, General Services staff will decommission and remove the RDP equipment beginning in January 2024. The Department will work with the City's Purchasing Division to secure any salvage value of the obsolete equipment.

Cc Daniel Driscoll, Wastewater Superintendent
Tina Waterman, Purchasing Director