



## IRON REMOVAL PLANT MEDIA PILOT STUDY

At a regular meeting of the City of Hartford Commission, located at 19 West Main Street and called to order by Mayor Jane M. Danger on December 15, 2025

The following resolution was offered:

Moved by Commissioner \_\_\_\_\_, and supported by Commissioner \_\_\_\_\_.

**WHEREAS**, the City of Hartford’s drinking water system relies on groundwater treated at the Iron Removal Plant for iron and manganese removal, and during the 2025 EGLE Sanitary Survey, it was documented that manganese levels increase following filter backwash cycles and, in some instances, exceed the Secondary Maximum Contaminant Level (SMCL); and

**WHEREAS**, EGLE recommended optimization of backwash procedures and continued monitoring of pressure loss through the filters, and in response, City staff have increased both the frequency and duration of filter backwashing in an effort to improve manganese removal performance; however, these adjustments have resulted in only slight and sustained improvements in finished water manganese levels; and

**WHEREAS**, in addition, EGLE advised that if the elevated manganese issue persists, the City should consult with a qualified professional to conduct a thorough inspection and performance evaluation of the Iron and Manganese Removal treatment system and

**WHEREAS**, to comply with EGLE guidance and to avoid premature capital investment without verified performance data, the City solicited a professional pilot study proposal to evaluate an alternative catalytic filter media; and

**WHEREAS**, Peerless-Midwest, Inc. has proposed installing and operating a representative pilot system within the existing Iron Removal Plant using catalytic pyrolusite media, a naturally mined mineral comprised of approximately 75% manganese dioxide (MnO<sub>2</sub>) and NSF-61 certified for drinking water applications; the pilot system will operate until manganese breakthrough reaches one-half of the SMCL, allowing the study to determine the number of operational hours before breakthrough and evaluate long-term treatment performance under actual Hartford system conditions; and

**WHEREAS**, testing will include monitoring of iron, manganese, and free chlorine residuals using standard Hach field test methods, and at the conclusion of the pilot study, Peerless-Midwest will provide a formal engineering report detailing system performance and design recommendations for potential full-scale treatment upgrades; and

**WHEREAS**, the total cost of the pilot study is \$12,500, with funding proposed to be allocated from the City’s Water Fund or applicable capital planning reserves, and completion of the pilot study will reduce future financial risk by ensuring that any long-term treatment upgrades are based on verified performance data rather than assumptions; and

**WHEREAS**, the operation of the pilot study is expected to provide several key benefits, including improving long-term treatment reliability for iron and manganese without the need to change chemical treatment, supporting regulatory compliance and stability of distribution system water quality, providing data-driven guidance for future treatment plant upgrades, and protecting ratepayers from unnecessary capital expenditures that may not provide proven benefits; and

**WHEREAS**, this project directly supports EGLE’s regulatory guidance and represents a prudent, data-driven step toward improving Hartford’s finished drinking water quality; and

**NOW THEREFORE, BE IT RESOLVED**, the City Commission hereby authorizes the Peerless-Midwest catalytic media pilot study at a cost of \$12,500, and further authorizes the City Manager to execute the agreement on behalf of the City.

YEAS: Commissioners’

NAYS: Commissioner          ABSENT:

RESOLUTION DECLARED ADOPTED

DATE: December 15, 2025

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RoxAnn Rodney-Isbrecht, City Clerk

I RoxAnn Rodney-Isbrecht, Clerk for the City of Hartford, do hereby certify that the foregoing is a true and complete copy of a Resolution duly adopted by the City Commission of the City of Hartford during a meeting held on December 15, 2025 and the public notice of said meeting was held in compliance with Act 267 of the Public Acts of Michigan of 1976, as amended.

DATE: , 2025

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RoxAnn Rodney-Isbrecht, City Clerk  
City of Hartford  
19 West Main Street  
Hartford MI 49057