

Perma-Fix Environmental Services Provides Further Updates on PatentPending Process for Destruction of PFAS Compounds

Selects ProcessBarron for fabrication and assembly of the new commercial unit

Commercial unit on track to begin accepting waste in the second half of 2024

ATLANTA, June 12, 2024 (GLOBE NEWSWIRE) -- Perma-Fix Environmental Services, Inc. (NASDAQ: PESI) (the "Company") today provided an update on its patent-pending new process, Perma-FAS®, for the destruction of per- and polyfluoroalkyl substances (PFAS), including design specifications and the Company's selection of ProcessBarron for the fabrication and assembly of its new Perma-FAS commercial unit. The system is a 1,000 gallon unit and is expected to be fully operational and accepting commercial waste for destruction by Q4 of this year.

Mark Duff, President and CEO of Perma-Fix, commented, "We are making rapid progress on the design and fabrication of our first Perma-FAS commercial unit, which we expect to be operational later this year. Towards this end, we are delighted to partner with ProcessBarron, which brings decades of experience constructing custom-engineered industrial solutions. We believe their track record and efficiency on such projects lends itself well to our strict timelines and safety standards, given the tremendous demand we have witnessed since first announcing our new system. Our relationship with ProcessBarron leverages their decades of experience in the application of proven industrial innovations to enhance performance of our initial system, while providing access to their team of engineers for system optimization. Following startup at our first facility, this relationship provides the ability to deploy additional units at our other facilities with increased efficiency, while reducing delivery schedules to support accelerated treatment activities to address nationwide PFAS markets over the next few years."

Dr. Louis F. Centofanti, founder of the Company, Executive Vice President of Strategic Initiatives, and inventor of the technology, stated, "The latest regulatory and enforcement measures implemented by the U.S. Environmental Protection Agency (EPA), including the new CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) Enforcement Discretion Policy, has created a renewed sense of urgency for waste generators. Our process is unlike traditional disposal methods for PFAS-contaminated materials, such as deep well injection and landfilling, which pose substantial environmental risks, including potential groundwater contamination. Ours will be the first known sealed, chemical destruction unit commercially operating in a fixed facility that can accept and

destroy PFAS to acceptable levels in the U.S. We believe the unit will be able to achieve an impressive 99.9999% destruction level. We have been sharing information with the EPA, including plans to begin commercial operation of our novel treatment technology in the coming months, and look forward to supporting their near-term goals, as well as their long-term mission to rid our nation of these dangerous chemicals."

The system uses a proprietary hydrolytic destruction process that is highly specific to PFAS compounds. It operates between 100-150 degrees Celsius and breaks down the carbon-fluorine chain, resulting in mineralization, with just calcium fluoride, water, and other non-hazardous organic byproducts that can be recovered and reused or resold.

Duff concluded: "I would also like to extend my gratitude to the team at Perma-Fix, including Dr. Centofanti, the chemists, and the engineers, who have all worked tirelessly to develop the commercial system in a timely and cost-effective manner. We had previously applied for patents and are planning additional patent applications surrounding this technology to address soils and filter media that we believe will provide us long-term protection on this groundbreaking intellectual property."

Commercial and government entities interested in speaking to a Perma-Fix representative about the new PFAS destruction process may contact the Company at sales@perma-fix.com.

About Perma-Fix Environmental Services

Perma-Fix Environmental Services, Inc. is a nuclear services company and leading provider of nuclear and mixed waste management services. The Company's nuclear waste services include management and treatment of radioactive and mixed waste for hospitals, research labs and institutions, federal agencies, including the U.S Department of Energy (DOE), the U.S Department of Defense (DOD), and the commercial nuclear industry. The Company's nuclear services group provides project management, waste management, environmental restoration, decontamination and decommissioning, new build construction, and radiological protection, safety and industrial hygiene capability to our clients. The Company operates four nuclear waste treatment facilities and provides nuclear services at DOE, DOD, and commercial facilities, nationwide.

Please visit us at http://www.perma-fix.com.

This press release contains "forward-looking statements" which are based largely on the Company's expectations and are subject to various business risks and uncertainties, certain of which are beyond the Company's control. Forward-looking statements generally are identifiable by use of the words such as "believe", "expects", "intends", "anticipate", "plans to", "estimates", "projects", and similar expressions. Forward-looking statements include, but are not limited to: the unit is expected to be fully operational and accepting commercial waste for destruction by Q4 of this year; we have the ability to deploy additional units at our other facilities; ours will be the first known sealed, chemical destruction unit commercially operating in a fixed facility that can accept and destroy PFAS to acceptable levels in the U.S.; the unit will be able to achieve an impressive 99.9999% destruction level; and plans for additional patent applications surrounding this technology that we believe will provide us long-term protection on this groundbreaking intellectual property. These forward-looking statements are intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. While the Company believes the

expectations reflected in this news release are reasonable, it can give no assurance such expectations will prove to be correct. There are a variety of factors which could cause future outcomes to differ materially from those described in this release, including, without limitation, future economic conditions; acceptance of our new process by the public; granting of the patents which are subject to review by the appropriate governmental authorities; industry conditions; competitive pressures; our ability to apply and market our new technology; acceptance of our new technology; and the "Risk Factors" discussed in, and the additional factors referred to under "Special Note Regarding Forward-Looking Statements" of our 2023 Form 10-K and Form 10Q for the first quarter ended March 31, 2024. The Company makes no commitment to disclose any revisions to forward-looking statements, or any facts, events or circumstances after the date hereof that bear upon forward-looking statements.

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