

Perma-Fix Medical S.A. Announces Successful Completion of 6 Curie Tests With Scale-Up of Its Non-Uranium Process to Procure Technetium-99m

ATLANTA, GA -- (Marketwired) -- 08/31/15 -- *Perma-Fix Environmental Services, Inc. (the "Company")* (NASDAQ: PESI), *today announced that Perma-Fix Medical S.A.*, a subsidiary of the Company, completed another successful scale-up of its process to produce Technetium-99m ("Tc-99m") from Molybdenum. The tests confirm that the Company's proprietary resin could withstand higher levels of radiation, up to 6 curies, while providing clinically useful doses of Tc-99m. Two tests were run, in which one run used natural Molybdenum and a second test used enriched Molybdenum-98 (98% purity).

Perma-Fix Medical S.A. plans to continue to conduct additional tests at these or higher curie levels in the near future as part of its multi-step validation and fine tuning of its Tc-99m technology.

Stephen Belcher, CEO of Perma-Fix Medical S.A., commented, "Achieving these results at the 6 curie level are extremely gratifying and further reinforce what we had expected. We plan to conduct additional tests in the near future; but based on these preliminary results, we are extremely confident in our path forward. Importantly, we believe we are now in a position to meet the requirements of customers, not only in emerging markets, but also in North American and European markets. Ultimately, we are convinced that our process will reshape the global supply chain of Tc-99m in the United States and around the world."

Dr. Louis F. Centofanti, CEO of Perma-Fix Environmental Services and Chairman of Perma-Fix Medical S.A., commented, "We look forward to presenting the results of these tests at the US Department of Energy Mo-99 Topical meeting this week in Boston. On the heels of this success, we are continuing with our plans to formalize additional partnerships, and prepare for regulatory submission in North America and Europe."

Tc-99m allows medical practitioners to image internal body organs and is used in 80%-85% of the 25 million diagnostic nuclear medical procedures each year in the U.S. alone. Common procedures include: cardiac imaging; cancer detection bone scans; gastrointestinal issues; and imaging of the brain, kidney, spleen and infections. The radioisotope market in Europe alone is expected to reach \$1.6 billion in 2017, up from \$1.1 billion in 2012.

Nearly all of the world's supply of Tc-99m comes from the thermal fission of highly enriched uranium ("HEU") targets in a small number of highly specialized reactors. The current process is costly and has proven an unreliable source of radioactive material leading to

severe worldwide shortages. The scheduled closure of the NRU reactor in 2016 and the OSIRIS reactor in France in 2018 are expected to have a further impact on the manufacturing and supply of these isotopes. The current process also raises serious proliferation concerns related to the threat associated with international production, transportation and/or use of HEU in the production of medical isotopes.

Perma-Fix's Medical S.A.'s technology has the potential to overcome these issues by using neutron capture to activate natural Molybdenum, a common metal, to produce Mo-99, which decays into Tc-99m. Unlike conventional processes, Perma-Fix Medical S.A.'s process can be produced locally using standard research and commercial reactors, thereby eliminating the need for special purpose reactors. The new process encompasses the full production cycle, from reactor to final medical supply, and should be easily deployable around the world.

To overcome past issues with neutron activation of Molybdenum, Perma-Fix S.A. has developed a specialized resin that is radiation resistant and holds large quantities of Molybdenum, but at the same time releases almost 90% of the Tc-99m as it forms from the decay of Mo-99. The resin, loaded with the activated Mo-99, is placed in a Technetium generator and slowly washed with a saline based solution. The eluent solution containing Tc-99m has been shown to meet targeted USP and EUP standards for Pertechnetate.

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 DOE, the 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 on the World Wide Web at http://www.perma-fix.com.

About Perma-Fix Medical S.A.

Perma-Fix Medical S.A. is a subsidiary of Perma-Fix Environmental Services Inc., a NASDAQ listed company. Perma-Fix Medical S.A. was formed to develop, obtain FDA and other regulatory approval and commercialize a new process to produce Tc-99m, the most widely used medical isotope in the world. The new process is expected to solve worldwide shortages of Tc-99m as it is less expensive, does not require the use of government-subsidized, weapons-grade materials and can be easily deployed around the world using standard research and commercial reactors, thereby eliminating the need for special purpose reactors. Please visit us on the World Wide Web at http://www.medical-isotope.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: we plan to conduct additional tests in the near future; we believe we are

now in a position to meet requirements of customers, not only in emerging markets, but also in North America and European markets; continuing with our plan to formalize additional partnerships, and prepare for regulatory submission in North America and Europe; and successful development of new process which encompasses the full production cycle, from reactor to final medical supply, and should be easily deployable around the world. 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; industry conditions; U.S. and state governmental laws and regulations adopted from time to time; and the additional factors referred to under "Special Note Regarding Forward-Looking Statements" of our 2014 Form 10-K and Form 10-Q for the guarters ended March 31, 2015 and June 30, 2015. 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.

Please visit us on the World Wide Web at http://www.perma-fix.com.

Contacts:

David K. Waldman US Investor Relations Crescendo Communications, LLC (212) 671-1021

Herbert Strauss
European Investor Relations
herbert@eu-ir.com
+43 316 296 316

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