June 3, 2011

Perma-Fix Signs Option Agreement to License Technology for Use in Proprietary Process to Produce Medical Isotopes

Perma-Fix completes initial development of new process to safely and cost-effectively manufacture Tc-99m

New process expected to solve worldwide shortages of Tc-99m

Designed to improve safety, lower manufacturing costs and eliminate proliferation concerns without the use of weapons-grade uranium

ATLANTA, June 3, 2011 /PRNewswire/ -- **Perma-Fix Environmental Services, Inc.** (NASDAQ: PESI) today announced it has signed an exclusive option agreement with Battelle, which operates Pacific Northwest National Laboratory for the U.S. Department of Energy, to license technology from PNNL for use with Perma-Fix's proprietary process to safely and cost-effectively produce Molybdenum-99 (Mo-99), which is used to make Technetium 99m (Tc-99m).Tc-99m is the most widely used medical isotope in the world, and allows medical practitioners to image internal body organs. The option agreement follows the successful development of a proprietary manufacturing process for medical isotopes developed independently by Perma-Fix, as well as successful completion of a Cooperative Research and Development Agreement (CRADA) between Perma-Fix and PNNL. Perma-Fix has applied for patents covering various steps of the process and will incorporate PNNL's technology into its process.

Tc-99m is used in the nuclear medicine field for 80-85% of the approximately 25 million diagnostic nuclear medical procedures performed each year, from functional cardiac imaging aiding in the diagnosis of a large number of heart diseases; cancer detection bone scans; gastrointestinal issues; and imaging of the brain, kidney, spleen and infections. There is no domestic source of Mo-99, and nearly all of the world's Mo-99 supply comes from the thermal fission of highly enriched uranium (HEU) targets in foreign reactors, which is a costly and unreliable source of radioactive material and raises serious proliferation concerns. Production issues have caused severe worldwide shortages in the supply chain of Mo-99, disrupting medical procedures. These shortages are due to aging reactors, production interruptions, limitations on starting materials, and increasing demand for the isotope, which is now used in over 40,000 procedures per day in the United States alone. Today's shortages are exacerbated by the present shutdown of the National Research Universal reactor at Chalk River Laboratories in Canada, the major source of Tc-99m in the U.S.

Perma-Fix's new Mo-99 production process encompasses the full production cycle from

reactor to final medical supply. Unlike conventional sources, the new process can produce Tc-99m from natural Molybdenum using research or commercial reactors and offers important advantages over the current production methods, including a more stable supply of the radioactive isotope.

Dr. Louis F. Centofanti, Chairman and Chief Executive Officer, stated, "We are very excited to unveil this breakthrough technology. There are a number of important benefits to our new process. First, we believe this technology has the potential to alleviate the worldwide shortages of Tc-99m, due to its use of readily-available, natural Molybdenum, rather than highly enriched uranium. Additionally, we believe that this technology can be easily deployed around the world using standard research and commercial reactors, thereby eliminating the need for more special purpose reactors. We expect this process will be much better for the environment since waste generated during the production process is more readily treated and disposed. Until now, there were no viable treatment or disposal options for the waste generated from production of these isotopes. Moreover, our process is far less expensive and does not require the use of government-subsidized, weapons-grade materials. As a result, we expect our process will alleviate major concerns about nuclear proliferation, which have plagued the industry."

Dr. Centofanti continued, "In addition to our proprietary processes, we believe we are well positioned to commercialize this technology due to our unique facilities and permits. Our facilities have been used in the past to produce radioisotopes for medicinal uses and this technology is a natural extension of our capabilities into new markets. Ultimately, we believe these technologies will not only reduce costs, help the environment, and solve proliferation concerns, but more importantly, will benefit the patients that require a steady and reliable supply of these isotopes for life saving medical procedures. We are very proud to be a part of this major undertaking."

About Perma-Fix Environmental Services

Perma-Fix Environmental Services, Inc., a national environmental services company, provides unique mixed waste and industrial waste management services. The Company's increased focus on nuclear services includes radioactive and mixed waste treatment services for hospitals, research labs and institutions, federal agencies, including the Department of Energy ("DOE"), the Department of Defense ("DOD"), and nuclear utilities. The Company's industrial services treat hazardous and non-hazardous waste for a variety of customers including, Fortune 500 companies, federal, state and local agencies and thousands of other clients. Nationwide, the Company operates seven waste treatment facilities.

About Battelle

Battelle is the world's largest independent research and development organization with 22,000 employees in more than 130 locations worldwide. Headquartered in Columbus, Ohio, Battelle manages or co-manages six national laboratories for the U.S. Department of Energy, including Pacific Northwest National Laboratory in Richland, Wash. PNNL employs 4,900 staff, has an annual budget of nearly $1.1 billion, and has been managed by Battelle since the lab's inception in 1965.

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: benefits to our new process, such as having the potential to alleviate the shortages of Tc-99m; this new technology easily deployed around the world; environmental benefits to our new process; ability to commercialize this technology; and that this new technology will benefit patients. 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; competitive pressures; our ability to apply and market this technology; acceptance of our new technology by the medical industry; changes to our existing permits by appropriate governmental authorities; changes to existing laws limiting the treatment, storage or disposal of the residue of Tc-99m; ability to utilize our new technology with the technology licensed from PNNL; and the additional factors referred to under "Special Note Regarding Forward-Looking Statements" of our 2010 Form 10-K. 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.

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