Spring/Summer 2013

SADAT ASSOCIATES, INC. • TRENTON, NJ FOUNDED 1986



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SAI Announces New Office in Pennsylvania

SAI is pleased to announce the opening of a new branch office in Montrose, Pennsylvania. According to SAI's Chief Executive Officer, Dr. Marwan M. Sadat, P.E., "SAI has been looking forward to taking this step for some time now. We have established a reputation in our twenty-eight years serving the State of New Jersey as a creative, innovative environmental consulting firm. Our new office in Montrose helps us expand our business so that we can provide service to the Commonwealth of Pennsylvania, too."

SAI's new office is located at

110 Wilkes-Barre Turnpike Montrose, PA 18801 (570) 278-9600

For more information, or to discuss how SAI can help your Pennsylvania business endeavors, please contact SAI at (570) 278-9600 or by email at info@ sadat.com.

Update to Clients

SAI Client's Groundbreaking of Unprecedented Warehouse on Troubled Landfill in Jersey City

In our Fall 2007 newsletter, SAI wrote about being selected to assist AMB Property Corporation (now Prologis) in determining the feasibility of substitut-

ing an 880,000 squarefoot warehouse redevelopment project for a previously approved landfill cap on a portion of the former PJP Landfill in Jersey City, NJ. We are pleased to announce that Prologis, the leading global provider of industrial real estate, broke ground at the site in April of this year to begin construction of the warehouse facility.

The former PJP Landfill was placed on the EPA's Superfund List in the early 1980's after a fire at the landfill could not

be extinguished by conventional means. The site had been burning underground for years when the Jersey City Fire Department attempted to extinguish the fire. Instead of putting out the fire, however, the water washed away the ash from the surface and allowed more air to feed the combustion.

During that time, Dr. Marwan Sadat, P.E. (then Director of NJDEP's Division of Waste Management) opted to hire Boots & Coots, a Texas oil well firefighting company, to demonstrate techniques for underground firefighting. The eventual solution was to excavate over 1 million cubic yards of waste, smother the excavated smoldering materials with water,



Above, left to right, Dr. Lahbib Chibani, P.E., President of SAI; Dr. Hamid Moghadam, Chairman & CEO of Prologis; Mr. Joe Wiley III, Senior Vice President of SAI. Photograph taken on April 10, 2013, at the groundbreaking ceremony at the site of the former PJP Landfill in Jersey City, NJ.

ing the waste (with proper cover). During the excavation hundreds of drums of hazardous waste were removed, some exploding on contact with the cooler

and release the heat before reburying and compact-

SAI was originally retained by Prologis based on its reputation and experience in landfill management and redevelopment as well as Dr. Sadat's personal knowledge of both the landfill's unique issues and the regulatory agencies involved. SAI's efforts focused on gaining concurrence from NJDEP that the proposed warehouse met the NJDEP's solid waste rules Because of the site's inclusion on the

Superfund list, SAI had to design a remedial plan equivalent to the plan already approved based on the EPA Record of Decision. SAI also assisted Prologis in reaching agreement with the responsible party group on Prologis' role in performing a major portion of the remediation.

SAI amended the approved Closure Plan for a portion of the site to include regrading the waste, geotechnical improvements to prepare the site for development, subslab gas venting, an external gas collection system, and various materials for capping in place of the previously approved membrane cap. SAI also oversaw field activities in 2007/2008 when the

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Remedial Investigation Deadline --Compliance Advisory

On June 17, 2013, the NJDEP published a compliance advisory alert to notify the parties responsible for the remediation of a contaminated site that the Remedial Investigation (RI) deadline is May 7, 2014 for remediating discharges that occurred before May 7, 1999.

The NJDEP defines the completion of the RI for an entire site as a complete RI Report prepared in accordance with the Technical Requirements for Site Remediation (Tech Rules), certified by a Licensed Site Remediation Professional (LSRP), and submitted to NJDEP, along with any associated forms.

NJDEP will not grant extensions to this deadline. When the Legislature promulgated and passed the Site Remediation Reform Act (SRRA) in 2009, they already extended deadlines by five years. Because this is a State statute, there is no mechanism for NJDEP to extend the deadline.

Responsible Parties who are found to be non-compliant will be referred to the Enforcement section of NJDEP in

Prologis Warehouse

site was regraded for development. SAI developed a specification for use of Recycled Concrete Aggregate (RCA) for use as sub-base material for the warehouse construction. SAI reviewed applications from suppliers of RCA and certified over 400,000 cubic yards of RCA, which was obtained free of charge, saving Prologis millions of dollars over previous estimates for obtaining equivalent fill material.

As Mr. Hamid Moghadam, Chairman and CEO of Prologis, noted in his address to the crowd at the groundbreaking ceremony, this project represents one of his company's most notable recent projects, both for the technical challenges presented and for the spectacular location in the heart of the NJ port and transportation hub. In addition, the tenants that have leased most of the available space are not typical warehouse users but suppliers of goods that require complex handling before shipment. Prologis estimates that these tenants will create an estimated 800 permanent jobs in the Jersey City area.



Above left, a view of the Jersey City landfill in August 1985 when the fires were active. Right, an artist's rendering of the proposed warehouse facility.

SAI Assists Delaware River Tubing with Land Use Issues

SAI has had the pleasure of assisting Delaware River Tubing (DRT) in Hunterdon County, with various land use permitting issues. DRT hopes to utilize a 0.67-acre plot of land along Route 29 in Kingwood Township as a staging area for their business which, as the name indicates, helps people enjoy the Delaware River in the summer months. DRT drops tubers off at a location upstream and provides two exits downstream.

SAI assisted DRT by preparing an Environmental Impact Assessment for their staging site and completing a survey of the property. As a result of SAI's efforts, the NJDEP has approved the installation of ladders at the two exit sites. This makes the sites safer for DRT's patrons, and minimizes environmental impacts by preserving the integrity of the bank slope. Currently, SAI is working to secure approval of these ladders from the U.S. Army Corps of Engineers. SAI's efforts will allow DRT to provide a more orderly approach for recreation on the river (which is a permitted and protected use according to the Delaware River Basin Commission).

Mr. Greg Crance, the owner of DRT, is a prominent local businessman who prides himself on being an environmental steward of the Delaware River and its banks. DRT was the 2011 winner of the New Jersey Governor's Tourism Award. For more information

about DRT or to schedule vour time on the river next summer, please go to www.delawarerivertubing.com.



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From the Editor -

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If you would like to receive a full-color electronic version of our newsletter in Adobe PDF format via email, or if you want additional information about SAI and its services, please send an email to: Ithompson@sadat.com.

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Petty's Run Park Opens in Trenton

On May 14, the NJDEP opened the newly preserved archeological dig Petty's Run to the public. Petty's Run, located between the Trenton Barracks and the State House, was used to power cotton, paper and steel mills as early as 1731.



Above, Dr. Lahbib Chibani, P.E., President of SAI, and Ms. Nicole Chamoun, Environmental Scientist with SAI, at the Petty's Run opening ceremony on May 14. Dr. Chibani and Ms. Chamoun were instrumental in SAI's efforts to design a stormwater management system for Petty's Run.

The site was discovered in 1996 during an expansion of Thomas Edison State College. Originally, the NJDEP desired to convert much of the area around the dig into a large public park that encompassed both the archeological dig property and the adjacent scenic Delaware River, but budgetary constraints limited the park to the dig site only.

The preservation team was spearheaded by Hunter Research, Inc., a Trenton-based cultural resources firm that recognized the educational and cultural value of preserving Petty's Run. SAI joined the team as a subconsultant to Wallace, Roberts & Todd, a national urban planning and architecture firm based in Philadelphia. SAI provided civil and stormwater design work for the park.

The project was almost abandoned in 2011, but public outcry led the NJDEP to revive it. NJDEP and Mercer County reached a deal to split the \$1.8 million cost to transform the site into a proper outdoor classroom for the thousands of school children who visit Trenton each year to learn about the workings of state government. The project includes \$30,000 a year to maintain Petty's Run for the next decade.

One of the more interesting and unique features found during the excavation of Petty's Run was a steel furnace, one of only five in operation during the colonial period. Colonies imported most of their steel from England, but this steel furnace was used to forge weapons used during the Revolutionary War.

SAI is proud to have played a part in preserving this cultural attraction that demonstrates the historic importance of the City of Trenton.



Above, the location of the original steel furnace (covered with glass) and the water wheel; below, Petty's Run trickles through its historic culvert.



RI Deadline

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which civil and administrative penalties are assessed. Additionally, the NJDEP will take direct oversight of the subject property, as required by law for certain contaminated sites. Direct oversight includes applying all NJDEP rules and regulations, assessing costs for oversight and potentially assessing Natural Resource Damage claims. This could potentially increase substantially the cost of the remediation of the site.

LSRPs are required to be aware of these requirements, including mandatory deadlines within the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS) Rules. LSRPs also understand the time required to evaluate complex sites. For these reasons, LSRPs should be guiding their clients through the process of completing the RI and the RI Report. The time to act is NOW. Since the implementation of SRRA, the environmental industry in New Jersey has become exceptionally busy.

If your site experienced a discharge after May 7, 1999, SAI recommends that you contact your LSRP to check the progress of your remediation. If you find that you need an LSRP, SAI can offer the services of Mr. John Zingis, LSRP, and Mr. James P. Mack, LSRP, to assist you. Please contact us to set up a meeting.

Additional and specific information is available on the NJDEP's Site Remediation Program website, http://www. state.nj.us/dep/srp/.

For additional information about stories in the newsletter, or to learn more about SAI's services and experience, please contact Joe Wiley at 609-826-9600 or at jwiley@sadat.com.

Welcome!

Erik Lujkantschenko

Mr. Lukjantschenko is a member of the Engineering Group at Sadat Associates, Inc. He has experience working on construction inspection/oversight of landfill closure projects, soil investigation and preparation of daily field reports. Mr. Lukjantschenko received a B.S. in Environmental Science from Rider University in 2013.

Congratulations!

Congratulations to Dr. Marwan Sadat, P.E., Dr. Emery Coppola, P.G., and Dr. Zahid Aziz whose papers have been accepted for presentation at the Solid Waste Association of North America's (SWANA) Landfill Symposium in March 2014 in Monterey, California.

Dr. Sadat and Dr. Coppola's presentation is entitled, *Estimating the Impacts of Leachate-Impacted Groundwater on a Tidal River*, and Dr. Aziz will be presenting, *Isotopic Evaluation of Natural Attenuation of Contaminants in Aquifer Beneath a Landfill.*

This is a sought-after, prestigious opportunity as less than half of all submissions were accepted for the event.



Sadat Associates, Inc. 1545 Lamberton Road Trenton, NJ 08611

SAI Welcomes Two New LSRPs

SAI is pleased to announce the addition of two new Licensed Site Remediation Professionals (LSRPs) to our staff.

Mr. Jim Mack joins SAI as a Senior Project Manager and LSRP. Mr. Mack holds a B.S. in Geology from Waynesburg College in Waynesburg, Pennsylvania, and an M.S. in Geology from Adelphia University. He has over 30 years of experience performing environmetal projects in New Jersey and throughout the US. He has specific skills and experience with the Triad approach, a method of site characterization that provides increased accuracy and confidence in the outcome of investigations and remediation. He has used the Triad approach to expedite brownfield redevelopment projects and to assure that cleanups in urban areas produce safe and healthy environments. Mr. Mack was nominated to serve as the Academic Representative for the state LSRP Boad. Mr. John Zingis is a Senior Project Manager and LSRP. He holds a B.S. in Environmental Sciences from Stockton State College, and has studied a Civil Engineering curriculum at Ocean County College. Mr. Zingis has over 25 years of consulting experience in managing a wide range of environemtal compliance projects as reviewed by the NJDEP and/or the USEPA. Mr. Zingis is well-versed in several environmental statutes, including all aspects of the Site Remediation Program, Freshwater Wetlands Protection Act, Coastal Area Facility Review Act, Flood Hazard Area Control Act, and the Pinelands Comprehensive Management Plan. He has managed projects as small as single-family homes and as large as complex, multi-million dollar commercial sites.

SAI is proud to offer the services of these two experienced, respected experts for all of your LSRP requirements.

SAI Attends Sustainable Raritan River Initiative's Annual Conference

This spring, SAI was a sponsor of the Sustainable Raritan River Initiative 5th Annual Conference held at the Edward J. Bloustein School of Planning and Public Policy on June 11th.

Begun in 2009, the purpose of the Raritan River Initiative is the continual development of a regionally endorsed approach to the restoration and future protection of the river. This initiative brings together a collaboration of over 125 organizations, businesses, municipalities and counties. SAI was pleased to be part of this initiative as an Engineering Partner. The theme of this year's conference was "Fishable and Swimmable", with a focus on water quality and watershed protection. Dr. Emery Coppola, Ms. Nicole Chamoun, and Ms. Lisa Thompson of SAI prepared an exhibit highlighting hydrogeological and water quality studies conducted at the ILR Landfill in connection with the Raritan River. The aim of the exhibit was to define the hydrogeology of the ILR Site, the spatial and temporal distribution of groundwater quality at the site, and to assess the site's potential impacts on the surface water quality of the nearby Raritan River.

Come visit us at the 96th Annual League of Municipalities Conference! On November 19-21, 2013, SAI will once again be in booth 746 in the Atlantic City Convention Center. Now that you know where to find us, stop by and say Hello!