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Update to Clients

Update

NJDEP releases new recycled concrete reuse guidance

Recent news stories around the state have highlighted problems resulting from the use of recycled concrete at construction sites.

In an effort to ensure that the State's concrete recycling system is clean and won't contaminate otherwise clean sites, NJDEP in June released "Guidance for the Sampling and Analysis of Concrete Designated for Recycling." The Guidance document provides information about when testing needs to be conducted, along with a discussion of sampling and analysis protocol.

NJDEP is requiring sampling and analysis of concrete at all demolition and construction sites under Site Remediation and Waste Management Program oversight at a contaminated site when the concrete is designated for recycling or beneficial use rather than disposal. The characterization is required for demolished buildings, concrete roadways, sidewalks, curbing, etc. Uncontaminated concrete may qualify for recycling, and minimally contaminated concrete may qualify for beneficial use, if approved.

After demolition the concrete must be stockpiled on-site and sampled according to the protocol. The Case Manager may authorize in situ sampling prior to demolition for initial site screening, and may make site-specific modifications to the sampling and analysis requirements. No material can be moved from the site until the sampling re-

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Protect your company and your project SAI certifies fill for reuse projects

Since the earliest days of Brownfield redevelopment in New Jersey, SAI has recognized the liability issues revolving around the movement and reuse of fill material. With the significant demand for redevelopment sites, several high profile projects have recently been delayed due to improper classification of fill material, resulting in contaminated fill being brought to clean sites. Without proper certification, development costs and liability issues can soar.

In other cases, value can actually be added to a project's bottom line when the need for fill at a site can be married to the need for disposal from another site. NJDEP policy allows, under certain regulated programs, acceptance at a site of similarly contaminated materials when the engineering and institutional controls are sufficiently protective of the approved end use. These "transactions" are well regulated by the NJDEP under its implementation of the Technical Requirements for Site Remediation (N.J.A.C. 7:26E).

Problems may arise when current agency regulations do not provide sufficient oversight of the use/reuse of material. If a site is not under NJDEP oversight there is currently no regulatory oversight to certify the appropriateness of fill. As mentioned above, in recent months, several high profile projects have been identified where, due to absence of regulatory oversight, material presumed to be "clean" was used at a construction site as fill. Only afterwards did it become apparent that the material did, in fact, exceed the regulatory requirements for the proposed end use. This resulted in excessive costs and time delays as the contaminated material had to be removed and replaced.

SAI has worked with the redevelopment industry for many years to provide a service which character-



At projects where fill is brought to a site, care must be taken to ensure that the fill material is properly evaluated to protect the project owner from liability issues.

izes, monitors and documents the placement of in-fill material at redevelopment sites. At the Jersey Gardens Mall in Elizabeth, over 2.5 million cubic yards of recyclable material, including dredge material and C&D screenings, were brought to the site, providing revenue for the project developers and saving millions of dollars by eliminating the need to purchase fill. At the recently opened Bayonne Golf Club, a similar procedure was implemented under

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INSIDE

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eye on...

Environmental compliance services

SAI was retained to perform permitting, corporate auditing and compliance for two multinational firms headquartered in New Jersey.

Panasonic Corporation of North America retained SAI to audit and revise its air permitting program at the firm's North American headquarters and warehouse facility in Secaucus. Also, SAI will update the firm's Spill Prevention Control and Countermeasures Plan, required as a result of increasing the total fuel storage capacity at the site. Environmental engineers from SAI have revised Panasonic's facilities plans to meet EPA and NJDEP requirements. SAI also is addressing site permitting issues with the Hackensack Meadowlands Development Commission related to installation of the fuel oil storage area.

Maxell Corporation of America hired SAI to support its ISO-14000 certification program at the firm's US headquarters in Fair Lawn. SAI environmental scientists are developing corporate auditing and standard operating procedures to meet OSHA requirements for Hazard Communication, Fire Prevention, and Evacuation programs. SAI will provide training for the program. SAI will also review the Material Safety Data Sheets prepared by Maxell subsidiaries and vendors to assure compliance with recent changes to the OSHA standard.

For information about Regulatory Compliance services contact Rodger Ferguson at 609-826-9600.

NJDEP approves site-wide NFA for GAF property in South Bound Brook

SAI obtained a site-wide No Further Action (NFA) for the former GAF Main Plant Property, located on Main Street in South Bound Brook. The property, an 11-acre parcel located in the center of the borough, is being redeveloped by SAI Client Matzel & Mumford Organization for residential and retail/commercial space. Operations at the plant, which was previously used for manufacturing asphalt roofing shingles and asbestos tiles, ended in the mid 1980s. The property had been abandoned for 20 years.

Under SAI oversight, Matzel & Mumford conducted year-long demolition and remediation activities from the spring of 2004 through the spring of 2005. Approximately 1,600 tons of asbestos, 55,000 tons of petroleum-impacted soils and 2,700 tons of PCB-impacted soils were removed and disposed of at appropriate off-site facilities. As approved by NJDEP, the site was capped with a visual barrier and a foot of clean fill materials.

Working with NJDEP under Cleanup Star program NFA issued for site with multiple AOCs

Working creatively with—and following guidance from—NJDEP, SAI Cleanup Star Rodger Ferguson secured a site-wide No Further Action (NFA) for a redevelopment site in northern New Jersey. This is particularly significant as the site had six areas of concern (AOCs), though the program specifies a limit of two per submittal.

The Cleanup Star program allows a pre-certified professional to recommend issuance of an NFA based on completion of site efforts that comply with NJDEP's Technical Requirements for Site Remediation. This program significantly reduces the time frame for securing the NFA from months to days. A key limitation of the program, however, is there can be no more than two AOCs per Cleanup Star agreement, and there can be no groundwater impact. The major obstacle to more widespread use of the Cleanup Star program has been its application to sites with more than two AOCs.

In the northern New Jersey case, there were six AOCs of similar nature, but very minor contamination and no groundwater impact. In 2004 the municipality's traditional consultant had submitted a Remedial Action



The former eyesore GAF factory has made way for an attractive residential community in the heart of the Borough of South Bound Brook.

According to SAI Project Manager Sharon McSwieney, to date more than 100 of the planned 152 townhomes have been constructed and sales have been brisk. The proposed retail development is expected to begin at the end of 2006 or early 2007.

Workplan to NJDEP that had not been approved. Upon meeting with NJDEP and discussing the limited contamination and the desire to apply Cleanup Star principals to this site, NJDEP proposed an approach to allow that to happen. SAI then undertook three separate Cleanup Star efforts for the Site, each incorporating two similar AOCs. Remediation efforts undertaken for the AOCs included fill and contaminated soil removal.

Following remediation and post-remedial sampling, three reports were submitted, each requesting an NFA for two separate AOCs. NJDEP subsequently issued one site-wide unrestricted-use NFA for the property within 10 days. Without the Cleanup Star approach, the remedial efforts, including NJDEP oversight and review, could have taken many months. Construction of the redevelopment project is currently underway.

This success is just the most recent use of the Cleanup Star program by SAI for its Clients. SAI has three certified Cleanup Stars on staff, ready to apply their expertise to suitable remedial efforts. *For information about the Cleanup Star program contact Susan Goetz.*

Plan for innovative landfill closure advances in Galloway Township

SAI was retained in early 2005 to evaluate alternative approaches for capping and end use of the Galloway Township Landfill in Atlantic County. SAI prepared a feasibility study on alternatives including use of revenue-generating recyclable material and reuse of existing on-site cover soil.

Because SAI was able to demonstrate that the landfill was not significantly affecting the aquifer, the New Jersey Department of Environmental Protection agreed that the landfill would not require an impermeable cover.

After presentation of the feasibility study to the Township Infrastructure Committee, the recommendation to reuse on-site cover soils and to convert the site to passive recreation was made.

Kevin Dixon, the Township's Engineer, coordinated the presentation to the Township Committee, which was supportive of the passive recreation concept.

The selected alternative involves reusing two feet of on-site soils and creating topsoil by using the Township's compost, or locally available virgin topsoil, to mix with sandy soil, which is also available from the site. The selected alternative brings the cost of closing the landfill down from \$4.2 million for an impermeable cap to \$0.8 million.



SAI's concept for an ecological capping program for a landfill in South Jersey will meet environmental closure needs and provide valuable habitat.

Joe Wiley, SAI's Project Director, is coordinating with the Township Engineer to develop a landscape design to reintroduce native vegetation to allow the site to be restored to Pinelands habitat. There is great interest among environmental groups to restore disturbed Pinelands sites, such as landfills, to natural habitat. SAI's design of a landfill cap that will encourage natural regeneration of grasses, shrubs and trees indigenous to the area is an example of the innovative approaches for which SAI is known.

Concrete reuse rules

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sults have been reviewed, and the Department has approved the material for recycling or beneficial use.

Sampling results will be compared to the Department's Residential Direct Contact Soil Cleanup Criteria to determine the allowable uses of the material. Options may include direct unrestricted use on- or off-site for materials meeting residential standards. Materials not meeting residential standards may be authorized for a beneficial use project, if approved.

During demolition, materials must put in "distinct areas of demolition" in compliance with the sampling and analysis protocol, which includes:

1. What materials to sample
2. How to sample, and
3. What contaminants to analyze

The Guidance document can be obtained in either MS Word or PDF format at the following web address:

<http://www.nj.gov/dep/dshw/resource/techman.htm#concrete>

For more information on concrete reuse rules please contact Joe Wiley at 609-826-9600.

Rooms with a view

*The award-winning Tides at Seaboard Point project in North Wildwood is nearing completion, with construction of the last of four residential buildings and the community recreation center and pool. SAI provided environmental and engineering services for the project. The condominium community was originated by Seaboard Development, LLC, and is being completed by end-use developer K. Hovnanian Co. With extraordinary views of the bay and ocean, this project resulted in the approved closure of an abandoned landfill without the use of public funds—an excellent example of how brownfield redevelopment benefits communities. (See **Project** on page 4.)*



Welcome!

Ahnu Rajan. Ms. Rajan has joined SAI as a member of the Science Division. Ms. Rajan earned a Masters in Public Health from UMDNJ/Rutgers and earned her Bachelors of Science degree in Cell Biology from the University of British Columbia. Ms. Rajan had previously worked for SAI from 1994-1998, during which time she worked on projects concerning the ecological, occupational, toxicological, regulatory and legal aspects of environmental and occupational consulting. In addition, she led the development of a major database and analysis of soil and water site contamination.



Rick Gimello addresses brownfields group about State dredging policies

Rick Gimello, SAI Senior Vice President, spoke to members of the National Brownfields Association (NBA) about New Jersey’s dredging policies, and the effectiveness and advantages of using dredge material in revitalization projects.

The event, a guided boat tour of riverfront brownfield redevelopment projects in Philadelphia and Camden, took place in June during a cruise along the Delaware River on the ship *Spirit of Philadelphia*. The boat tour was attended by members of both the New Jersey and Pennsylvania chapters. In addition to Mr. Gimello’s talk, presentations were given by representatives of the NJDEP and the City of Philadelphia.

Prior to joining SAI, as Assistant Commissioner for Site Remediation, Mr. Gimello was responsible for the creation of the Office of Dredging and Sediment Technology at NJDEP. He is currently NBA’s Regulatory Affairs Co-Chair. SAI was co-sponsor of the boat tour. Also attending from SAI were Susan Goetz, Senior Vice President, and Cathy Farro.

Jennifer O’Keefe. Ms. O’Keefe, who has been working with SAI on a contract basis, has joined the Science Division. She earned her Bachelors of Science degree in Botany from the University of Delaware. After graduation Ms. O’Keefe worked for several years for the Delaware Department of Natural Resources & Environmental Control, where she worked for the Water Allocations Program. Since joining SAI, Ms. O’Keefe’s responsibilities have included development of remediation strategies for several projects and development of strategies for litigation support.



Clean Fill

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SAI oversight to provide more than 5 million cubic yards of fill material, which allowed a “links” design on a relatively small property.

The issue facing developers now, however, is the lack of agency guidance for many projects to certify material either exported or imported at a project site as “clean.” To satisfy this need, SAI has developed a procedure for providing a professional certification backed by professional liability insurance of soils as “clean,” thereby protecting both the “generator” as well as the “receiver” of the soils. SAI’s procedure is an adaptation from years of experience in reviewing fill material in general. SAI is currently assisting its Clients through the application of this procedure. Although not specifically regulated by NJDEP, this procedure is currently under NJDEP review.

For more information about this procedure, please contact Rick Gimello or Mounir Sadat, P.E.

Project highlighted at SAME meeting



Ramesh Tharwani, P.E., of K. Hovnanian Co.

SAI’s Seaboard Point project was the focus of a presentation on “Turning Brownfields into Greenfields: K. Hovnanian Homes’ Brownfield Redevelopment Resume” to the New Jersey Society of American Military

Engineers. The presentation was made by Ramesh Tharwani, P.E., Northeast Region Director of Land Development at K. Hovnanian Co., the project’s end-use developer.

In addition to its market success, the project, the first housing in New Jersey designed to be constructed atop a closed landfill, received the New Jersey Business and Industry Association’s 2003 Award for Environmental Excellence. SAI provided environmental, civil and geotechnical engineering services to both the initial redeveloper and K. Hovnanian.

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From the Editor -

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 email me at: kkane@sadat.com.

Thanks — we look forward to hearing from you.