

Gowanus Canal Community Advisory Group
June 28, 2011 – Meeting Summary

Attending: See Appendix

Jeff Edelstein opened the meeting with a brief agenda outline:

- 1) Presentation by Gardiner Cross of NYS DEC on Manufactured Gas Plant (MGP) sites, followed by a Q & A with the CAG.
- 2) Committee updates
- 3) Water Quality Committee motion to request TASC support.

The Archeology Committee is seeking input from CAG members about sites with archeological or cultural preservation significance. Jeff described the Pratt studio proposal that was voted on by the Real Estate Committee. The RE Committee voted against the CAG becoming the client, but recommended that CAG members participate as individual clients if interested in the studio. There was a reminder that the Administrative Committee is surveying CAG members to update membership status and records.

NYS DEC Presentation: Manufactured Gas Plants (MGPs)

The presentation by Gardiner Cross began with a description of the three MGP sites along the Gowanus. The MGP sites are among the most contaminated and contaminating sites along the canal.

Historically, the facilities made combustible gas from coal or petroleum products and generated waste in the form of coal tar. The 1820s saw the first commercialized production of manufactured gas, which was produced for local consumption. The manufacturing process was always messy, requiring cooling and purification prior to distribution. The coal tar condensed during the cooling period. The tar looks much like raw petroleum, but the density of the coal tar is slightly greater than that of water, so the waste can either sink through water or float. The tar does not dissolve readily in water, so most of it is still there, 80 years after the plant closed down. The Public Place site, historically the Citizen Gas Works, is still leaking tar into the canal.

Prior to the mid 1990s, MGP tar was not classified as a hazardous waste. National Grid (previously Brooklyn Union) consolidated several contaminated sites and began working with NYS DEC to clean the three upland MGP sites along the Gowanus. Working under a consent order, in 2005 National Grid began an ongoing program of upland site remediation.

Remedies for Upland Sites

The greatest concentration of tar on the upland sites is found in the source areas where the coal tar remains trapped in the foundations of historic buildings and remains close to the surface, i.e., close to human exposure. The sandy soil found along Gowanus Canal

makes any deep excavation very challenging. The tar has sunk to great depths (over 100 feet) through the sandy soils, so full excavation will not be a viable option. Excavation of source areas and areas where tar is located close to the ground surface is included in the remedy for the Citizen's site, and is the preferred remedy for the other two MGP sites as well. Other problems with full excavation:

- The deeper the excavation, the more robust the shoring of the waterway must be
- Installation of sheet-piling is noisy and disruptive
- Sheet-piling in historic areas can be difficult & the action is likely to impact historic features or objects, as well as being obstructed by foreign objects or features such as timber piles or buried concrete debris.
- Deep excavation requires pumping and treating enormous quantities of water, an engineering challenge
- Dense Non-Aqueous Phase Liquids (DNAPLs) can be remobilized when digging, increasing the potential for exposure

Though the remedy will include excavation, there will also be a need for containment of the tar we cannot reach. At Citizen's, this will consist of a barrier wall along the bank of the canal to prevent the tar from moving into the sediments at the bottom of the canal. The design calls for this barrier wall to be built using steel sheeting. Sheet-piling does not create a solid barrier, as the locations where the sheets are joined need to be sealed together after the sheets are driven. The sealants must be chosen carefully, because the coal tar is a solvent that can corrode some sealants. Other containment techniques include *in situ* solidification, (ISS), in which the soils are mixed with cement to form a solidified mass that holds the contaminants in place. ISS may require the stabilization of existing infrastructure, in particular the existing sewer line.

Q: How long will isolation in cement (ISS) hold?

A: Portland cement technology has been proven for 1000s of years.

Gowanus Canal Tar Impacts

Maps of the area show one site with coal tar contamination at 10 ft. below mean sea level (MSL). At deeper levels in the sediments, coal tar contamination becomes more widespread. At 20 ft. below MSL, the entire canal has coal tar in the sediments, which makes dredging to navigation depths problematic. Cross suggested that the more recent settled sewage effluent is covering the coal tar waste, and actually protecting the canal. In areas where coal tar is found right on the sediment surface (such as off shore from Citizen's) gas bubbles from the sediment can lift tar to the water surface. The tar droplets can also be moved by tidal currents back and forth along the canal bottom.

Public Place Site

DEC has made the most progress on the Public Place site. The design is under way now, and is roughly half complete. The first NAPL recovery wells are in place now. The well system is made up of 13 wells, with catchments of up to 20-25 ft (radius) each. The active recovery wells are part of a pilot project for recovery sites. The wells collect the

tar, but are not able to pull all of the coal tar out of the ground. Additional wells will be added as required. The design of the NAPL barrier wall is proceeding. A few temporary test sheets are scheduled to be installed this fall. The excavation component includes a 20 to 22 foot deep removal in the NW portion of the site, where the main gas holders were located. The foundations of these holders are still in place, and are major source areas for the tar contamination.

Lowe's Site

There is still a problem with the Lowe's site, specifically under the Pathmark. The site was only partially addressed, as Lowes's only volunteered their half of the site for the DEC cleanup. At this site, recovery wells have, and will continue to be installed in the parking lot. Since 2002, the gas wells have recovered 600 gallons, compared to 4,000 gallons collected at Public Place in the first month and a half. The Lowe's driveway has the most active wells.

There was an expression of concern from the group regarding the following issues:

- Protecting adjacent properties when digging and dewatering
- Groundwater contamination caused by installing barrier walls
- Groundwater mounding
- Groundwater modeling and accuracy
- Protecting the natural water flow and hydrology of the area

Q: Does leakage from the collapsed sewer line at the Bond-Lorraine site at Public Place result in movement of contaminated groundwater? Who will pay for the repair?

A: The sewer is probably leaking, but rainfall continues to be the biggest contamination concern. The repair required is a component of the economics of the project & it is unclear who will pay for the repair.

Q: Has DEC considered building another (new) sewer line alongside the collapsed one, to prevent disruption of services, while repairing the breach?

The Remedial Design will contain provisions to prevent the interruption of service, These provisions will have to be approved by the City's DEP, as owners of the sewer.

Q: What are the air quality issues associated with MGPs?

A: Air monitoring has shown that chlorinated solvents from current land uses are the biggest problem in the area, not vapor intrusion by the subsurface coal tar sites.

Q: If the Barrier Wall is installed within one block of residential sites, will the migration route of contamination be changed?

A: Only if done wrong, such as with incorrect groundwater modeling . We have monitoring wells in place which would detect any change in contaminant migration, and measures would be taken to prevent any deflection of the groundwater plume.

Q: If the proposed park is built at the Public Place site, would there be 30-40 recovery wells?

There already are recovery wells near the shore line at Public Place. When completed, the well heads will be in subsurface vaults, similar to ordinary manholes, so that the presence of the wells does not interfere with use of the park.

Q: If the flow of water is constrained or prevented from entering the canal, where does it go? Into residential basements?

Groundwater flow will only be blocked in a small area, and only to a depth of approximately 50 feet. Furthermore, the remedy includes an infiltration barrier to prevent rainwater from infiltrating into the ground over the site, so the total amount of water moving toward the canal will decrease. The intent of the barrier wall is to create a zone of no groundwater flow immediately behind the wall. Clean groundwater which moves onto the site is diverted around or under the no-flow zone. Groundwater levels will be monitored as construction proceeds to prevent any off site impacts.

DEC, EPA and Public Comment

Concern was voiced by CAG members that the remedies discussed at this point are different than those presented by DEC at an earlier time. One member suggested that the evolving nature of the site, the adjustment of proposed remedies, and the activities by EPA may trigger some additional public comment period. Cross said that this would require amending the ROD, and that the DEC plan has not been significantly changed. Another CAG member pointed out that the community is not as confident in the remedies described, and that he believes the changes to the plan are significant.

Though the SF designation is not enough to trigger a new public comment period, DEC is working with EPA on the remedies proposed to ensure that the canal is not re-contaminated.

Q: What is the expected lifespan of the new steel barriers? There has been some corrosion of the 25-year old sheet piling along Brewer's Brook at the Fulton MGP site.

A: DEC cannot say, but the barrier is intended to be a permanent solution. We have encountered some bulkheads in NYC that were not built with marine grade steel, and these bulkheads have corroded prematurely. These were not built by either NYSDEC or National Grid. The barrier walls here will be in the subsurface, where atmospheric corrosion is less of a concern, and will be specified to be the appropriate grade of steel.

Q: The groundwater modeling work informed DEC that total encapsulation would not be necessary, but that a barrier wall would be sufficient?

Correct. The modeling showed that the barrier wall, including short wing walls at the ends (and combined with an infiltration barrier to reroute rainwater) is sufficient to prevent tar migration into the canal.

Q: What happens if the groundwater table changes?

A: If groundwater is mounding, then National Grid will be directed to pump groundwater to lower the water table, and will be required to treat the water prior to discharging it to the canal.,

Q: Where will the liability lie? The RFP for the Gowanus Green site anticipates the site cleanup being paid for by the developers of the site, including 5th Avenue Committee..

A: The liability lies with National Grid, forever.

Q: What is the lifespan of the recovery wells? If they are no longer collecting tar, when do they get pulled?

A: The lifespan is unknown, and will be determined by whether or not they continue to produce tar.. Some of the wells at the Lowe's site have been in operation for over 5 years . When they stop producing, they will be considered for removal.

Next Steps

The CAG would like to see more engagement with the community by DEC. There is some concern that DEC's past outreach to the community through CB6 is not sufficient. DEC reps agreed to attend future meetings of the CAG and to continue the technical discussion with the CAG. There may be some interest in having discussions with DEC on specific issues in the Water Quality or Real Estate Committee meetings.

Gardiner Cross reminded the group that the remedy for the remaining two sites will be selected in the next two years, providing more opportunity for public engagement and comment. The DEC is interested in working with the community and CAG to this end.

Motion for Requesting TASC Support

The motion carried by the Water Quality Committee in support of requesting TASC support was introduced. Natalie Loney from EPA spoke briefly about the TASC. The EPA may or may not give the CAG a TASC technician, but she needs a letter from the CAG to process the request. The TASC support is paid for by EPA, though the TASC technician is independent from the agency. The services that the TASC would provide do not need to be known at this time.

As compared to the TAG, which requires the community to manage and process all details of the grant, the TASC management comes from EPA. The process is fast and streamlined by the agency, though the TASC is responsive to the community and CAG. The TASC does not interfere with the TAG grant. As an example, Natalie discussed the Quanta Resources site in NJ, where the community determined that TASC support was required in order for the community to truly understand the SF plan.

EPA plans to complete the Feasibility Study (FS) by the fall, and the Water Quality Committee determined that the TASC could help the group understand the new data. Additionally, there is a ticking clock, as the new federal budget will be announced soon and the EPA expects some cuts. If the CAG doesn't pursue the TASC now, this window may close.

One member wanted to see some TASC assistance for understanding and communicating risk to the community. Another CAG member stated that the CAG consistently gets held up on technical data and should be pursuing any help that is available to the group. Another member wanted to discuss the TASC on the committee level again before bringing the request before the full CAG.

The CAG did not have quorum. A motion was made to invoke the clause in the Charter that allows the group to suspend quorum if 4/5 of the members present voted to do so. The motion failed on a vote of 10 members in favor, 4 opposed, and one abstaining.

Appendix 1.

Organizational Members (attendance is indicated by “x”)		
Brooklyn Chamber of Commerce	Lori Raphael, Director of Real Estate and Development	X
Carroll Gardens Coalition for Respectful Development (CORD)	Rita Miller	X
Carroll Gardens Neighborhood Association	Maria Pagano, President	X
Center for Urban Pedagogy	Christine Gaspar, Executive Director	
Citizens of Pozzallo	John Heyer II, Chair, Public Relations Committee	X
Cobble Hill Association	Elizabeth O. Velikonja, Executive Board member	
Community Board 6	Craig Hammerman, District Mgr.	
Fifth Avenue Committee	Michelle de la Uz	X
Friends and Residents of Greater Gowanus (FROGG)	Marlene Donnelly	X
Friends of Douglass/Greene Park, Inc.	Maria Pagano, Treasurer	X
Gowanus Canal Community Development Corporation	David Z. Krieger	X
Gowanus Canal Conservancy	Hans Hesselein	X
Gowanus Dredgers Canoe Club	Ray Howell, Board member	
Gowanus Houses Tenants Association	Marguerite Scott, President	
Gowanus Neighborhood Association/Gowanus-4-Life	Betty Lester	
Metropolitan Waterfront Alliance	Louis Kleinman	
Park Slope Civic Council	Eric McClure, Trustee	
Park Slope Neighbors	Eric McClure, Campaign Coordinator	
Pratt Center for Community Development	Eve Baron, Senior Fellow for Planning and Policy	X
Proteus Gowanus	Angela Kramer Murphy	X
Red Hook Civic Association	John McGettrick, Co-chair	
Red Hook East Tenants Association	Dorothy Shields, President	
Red Hook West Tenants Association	Lillie Marshall, President	
Riverkeeper	Josh Verleun, Staff Attorney	X
Sierra Club	Diane Buxbaum, Chair, Gowanus Canal Committee	
South Brooklyn Local Development Corporation	Bette Stoltz, Executive Director	
Southwest Brooklyn Industrial Development Corporation	Josh Keller, Executive Director	
Southwest Brooklyn Industrial Development Corporation	David Meade	
Urban Divers Estuary Conservancy	Ludger K. Balan, Executive Director	
Wyckoff Gardens Tenants Association/Public Housing Communities, Inc.	Charlene Nimmons, President	

At-Large Members (Attendance is indicated by “x”)			
Brendan Aguayo	Aguayo & Huebener Realty Group	Park Slope	
Jerry Armer	President, 76 th Precinct Community Council, various past affiliations	Cobble Hill	X
Sabine Aronowsky	Videographer, Public Policy student	Boerum Hill	
Lauren Elvers Collins	Former Executive Director, Gowanus Canal Conservancy	Windsor Terrace	
Lucy DeCarlo	CORD	Carroll Gardens	
Anthony Deen	Gowanus by Design	Carroll Gardens	X
Eymund Diegel	Various	Gowanus	X
Nathan Elbogen	XO Projects, The Old American Can Factory	Gowanus	X
Lou Femenella	76 th Precinct Community Council attendee	Carroll Gardens	
Emily Guyer	The ELM Group	Park Slope	
Victoria Hagman	Realty Collective LLC	Red Hook	X
Andrew Jackson	Hudson Company	Gowanus	
Katia Kelly	Local blog, FROGG, CORD	Carroll Gardens	
Linda LaViolette	Abutting property owner/business/resident, Nicholas Cabrini, Inc.	Gowanus	
Alex Lechich	US Coast Guard	Cobble Hill	
Alphonse Lembo	Monadnock Construction	Gowanus	
Linda Mariano	FROGG	Gowanus	X
Margaret Maugenest	FROGG	Gowanus	X
Steve Miller	CB6 committee member, FROGG, CORD, CGNA, Block by Block	Gowanus/Carroll Gardens	X
Linda Mariano	FROGG	Gowanus	X
Abe Naparstek	Homeowner, various	Carroll Gardens	
Lizzie Olesker	Friends of Bond, FROGG	Carroll Gardens/Gowanus	
Bryan Quinn	Great Ecology and Environment	Park Slope	X
Gary Reilly	CB6 Environmental Chair	Carroll Gardens	
Triada Samaras	CORD	Carroll Gardens	
Buddy Scotto	Various	Carroll Gardens	
Deb Scotto	Clemente Realty	Carroll Gardens	
Cynthia Simmons	Mill Condominiums	Carroll Gardens	X

Facilitator: Jeff Edelstein

Facilitation Assistant: Beth Bingham