

Gowanus Canal Community Advisory Group  
March 8, 2011 – Meeting Summary

Attending: See Appendix

Jeff Edelstein opened the meeting with a reminder that Councilman Brad Lander's office will be hosting a meeting with NYC DEP to discuss the NYC Green Infrastructure Plan and Grant Program on Thursday, April 14, 2011. CAG members should email Jeff if interested in attending the meeting, or with any advance questions for the agency.

### **Remedial Investigation Summary**

Christos Tsiamis, Brian Carr, and John Senn were in attendance to give a presentation and answer questions pertaining to the Remedial Investigation. A handout was distributed that Jeff Edelstein had prepared listing questions submitted by CAG members and from CAG committees. The handout and EPA's power-point presentation can be accessed at: <http://www.epa.gov/region2/superfund/npl/gowanus/cag.html>. The following are key points from the EPA presentation:

#### *Contamination Types*

The primary contaminants identified in the sediment layers of the canal are

- Polycyclic Aromatic Hydrocarbons (PAHs)
- Polychlorinated biphenyls (PCBs)
- Metals (barium, cadmium, copper, lead, mercury, nickel, silver)
- Benzene, toluene, ethylbenzene, xylenes (BTEX)
- Non-aqueous phase liquid (NAPL)

All sediment layers are contaminated: surface soft, deeper soft and native soils. Surface water in the canal is also contaminated and where tested, all results exceeded screening values.

Air sampling tests revealed that the air around the Gowanus Canal does not present a risk to human health resulting from contamination of the canal. The results showed contamination to a standard that is consistent with other urban areas.

#### *Contamination Locations*

Core sampling of the canal bed and adjacent sites revealed that the soil cores have bands of discoloration, indicating different types/degrees of contamination dating from different eras. It was found that the deep sediment (native sediment) contained NAPLs, which indicates that the contaminants are moving. Although the degree of contamination of the top sediments alone is sufficient to justify the SF cleanup, the depth of the contamination is significant.

EPA has identified that the middle section (lengthwise) of the canal is the most contaminated. There are many known contributing sites along this section of the canal

including the Public Place and the other MGP sites, which are heavily contaminated. The degree of contamination is lesser in the lower section of the canal (south of Hamilton bridge).

Christos clarified that dredging may be a part of the remediation and that the depths would be determined by the degree of contamination and the engineering measures necessary for the cleanup to be achieved, i.e. dredging to a depth where contamination is relatively low and the engineering measures are feasible and effective. At this time EPA has no details about the possible dredging scenarios. The details will be worked out during the development of the feasibility study, currently under way, and during the remedial design.

#### *CSOs*

The CSO outfalls along the canal were tested by EPA during both dry and wet weather events. Sediment was also collected from the CSOs. All of the other outfalls (nearly 250 pipes) were also tested. The Remedial Investigation concluded that CSOs are contributing Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs) and metals to the canal.

#### *Groundwater Contamination Sources & NYS DEC*

A hydrogeologic evaluation, based on data from 88 monitoring wells in upland areas around the canal, revealed groundwater contamination on multiple sites adjacent to the canal. Many sites are known contributors of NAPLs to the groundwater and directly to the canal. Among them is the site now occupied by the Lowe's parking lot, where free products (NAPLs) are currently reentering the canal and have been found 30' deep in the soil. Though this site is a remediated Brownfield under NYS DEC rules, it will need further remediation for the SF cleanup. NYS DEC plans to resample the site, as well as the Pathmark site, to further investigate remaining contamination.

Groundwater levels in the area of the Gowanus Canal are influenced by the tidal flows of the canal itself. One particular concern identified by the EPA is the movement of NAPL contaminants to the canal and the vertical movement of the NAPL column in the canal sediment.

One CAG member asked whether it was accurate to conclude that the EPA's involvement "raised the bar" for contaminated upland sites. Christos said it did. EPA has stricter standards associated with the cleanup of Superfund sites, and although the full process might take longer, the cleanup will be more thorough and will involve cooperation from the State, the City and National Grid, among others.

#### **CAG Questions for EPA**

##### *Risk Assessment*

Christos introduced the issue of risk by explaining that EPA gets its authority for the investigation and cleanup from the SF law. The National Contingency Plan (NCP)

provides the roadmap that is used to develop the cleanup plan and is based on the law. Another Federal agency, the Agency for Toxic Substances and Disease Registry (ATSDR) is required to provide a public health assessment, a draft of which was completed in June 2010. Now that the Remedial Investigation data has been collected and analyzed by EPA, the ATSDR draft report will be modified and edited to reflect the RI's findings. The ATSDR has been invited to attend a future CAG meeting.

The report produced by ATSDR provides a qualitative assessment of risk, whereas the EPA's Risk Assessment included in the RI report is a quantitative document for assessing the risk that the site poses to humans and other life. The EPA's risk assessment calculates two things: 1) carcinogenic (cancer-causing) risks to humans; 2) additional risk for non-carcinogenic harm (to other organs, respiratory system, etc.)

Toxicity is a function of concentration and frequency of exposure, i.e., pollutants identified may not be harmful if they are present at a low level, and exposure is limited. Some new questions regarding risk, exposure and contamination that came up and were answered by Christos:

*Q: When there is a flooding event and canal water enters my garden, is there a risk associated?* Yes, there would likely be exposure to contaminants, but the risk is unknown.

*Q: Many residents and businesses (including Old American Can Factory) report coloration in the tap water. Is this because of contamination from the canal?* Tap water is under the city's jurisdiction. If there is a problem, the City should be notified and the water should be tested.

*Q: To what depth has coring been done and has anyone reached clean material?* National Grid has drilled and obtained sediment cores to a depth of over 100 ft. in the canal, in front of the Public Place site. The contamination was continuous. We are not aware of any tests along the canal that found clean material at any depth.

*Q: Do we need advisories posted along the canal, indicating risk to users who canoe or kayak along the waterway? The City has posted other advisories (i.e. no fishing, no swimming etc.)* Perhaps this also would be an issue for the city to handle.

*Q: (# 3) Was any sampling performed for radioactive material as part of the RI?* No. This testing is only done if EPA suspects these materials are present because of historic use or dumping.

*Q: (# 4) Have ecological risks been considered to potential future species of plants and animals that are likely to return to the canal after the cleanup and restoration of edges?* No. EPA's procedure for an RI is to only investigate present conditions.

*Q: Many groups in the community have a vision for the future of the canal that involves increased wildlife habitation, soft edges and other features not being considered at this*

*stage. After the cleanup, will we be left with a bad asset because of decisions being made now for things like bulkhead design?* Though the RI focused only on present conditions, the proposed solutions explored during the feasibility study, including the preferences for the reconstruction of deteriorated bulkheads, will be discussed with the community.

*Q: Given that there is evidence of groundwater contamination, will the parcels of land adjacent to the canal be tested?* As the EPA moves forward with the feasibility study, the contamination of groundwater will be addressed. NY State is responsible for addressing contaminated upland sites but EPA will work closely with the State to achieve the appropriate solutions

*Q: What is the relative risk of toxic exposure resulting from boating on the canal or otherwise spending time along the water?* The EPA does not provide a comparison of the relative risks of activities. For example, the agency does not determine whether exercising along the canal is akin to smoking.

*Q: Is anyone looking at the health histories of residents to establish a baseline for measuring risk to the health of residents?* It is usually the NY State DOH, not the EPA, that would initiate such a study upon request by the citizens. These studies take a lot of time. The purpose of the EPA study was to determine if there exists sufficient risk to human health and the environment that would require that the canal be remediated.

*Q: (#10) What is the process by which the EPA and NYC DEP will work together on the CSOs?* The RI has determined that NYC CSOs contribute SF contamination to the canal. As a result, the contributions of toxic chemicals from the CSO discharges will have to be addressed as part of the SF cleanup. There cannot be a cleanup without addressing this issue. EPA has been in talks with DEP (at the level of Deputy Commissioner) and the solution will have to be a collaborative effort.

*Q: Will NYC DEP have to comply with EPA determined levels of discharge?* No. From the point of view of a Superfund cleanup, the goal is to stop the inflow of SF contaminants into the canal so as to not re-contaminate the sediment following cleanup.

*Q: Why were air quality tests taken at canoe level and not breathing level?* Air quality measurements were taken both at the canoe level and at the street level. The air in the vicinity of the canal does not pose a risk outside EPA's acceptable risk levels.

*Q: At one time the NYC DEP said no to improving the waterway to a standard that is "fishable/swimmable." Who gets to establish this standard and can another agency or group force the city to clean the canal to the highest level?* These water classifications are established under the Clean Water Act (CWA) which has been delegated to the NYS DEC to enforce.

Note: Jeff Edelstein stated that he has been in touch with NYS DEC about the state's reclassification program. For the past 25 years, NYS has been working to reclassify the 17 watersheds of the state. All have been completed, with the exception of two upstate

watersheds and the NYC marine area watersheds. The NYS reclassification staff has been reduced dramatically so the process is slow. NYS expects to complete the two upstate watersheds within the next few years and then get to the NYC marine watersheds.

*Q: The water cleanliness standard for the city has never reached for a goal of zero contamination; can this be achieved? Under the Superfund clean-up will the approach developed in concert with DEP result in a higher level of water quality?* The solution to the CSOs will not be perfect. The agencies involved will work toward a “good” solution, which will certainly require political will and money to achieve.

*Q: Will NYC DEP still be proceeding with their plans to dredge and cap at the upper end of the canal near the flushing tunnel?* EPA’s understanding is that DEP’s plans to dredge and cap are now on hold so as to coordinate with EPA’s overall cleanup approach for the canal which will be made in 2012.

Questions that EPA will consider and then respond to, as appropriate [note: EPA’s subsequent responses are shown below]:

- Will EPA be prioritizing the CSOs with the highest levels of discharge?  
Response: That is a possible approach that has already brought up during EPA’s discussions with NYC.
- Will EPA be addressing the impacts that future developments (such as Atlantic Yards, Toll Bros. site) will have on future CSO discharges?  
Response: EPA intends to address this issue during the feasibility study discussions with New York City.
- How will filled basins be addressed?  
Response: Contamination has been found in both filled in basins that were tested and will have to be dealt with as part of the Superfund cleanup. A decision has not been made yet as to whether the cleanup of the filled in material will be done under EPA’s canal cleanup or under NY State’s uplands cleanup.
- How will concrete, gravel and other similar debris that has been dumped in the can be handled?  
Response: This is an issue that will be examined during the design phase of the cleanup.
- Would the infiltration of stormwater runoff (through Green Infrastructure) exacerbate contamination of the canal by increasing groundwater movement through contaminated soils?  
Response: That is certainly a concern that has to be addressed. If water infiltrates through contaminated soil, the contaminants will be mobilized into the groundwater and, eventually, into the canal. Therefore, we would expect that the cleanup of contaminated properties will take place before the building of any green infrastructure that would involve these properties.

**Appendix: Attendance 03/08/2011**

<b>Organizational Members:</b>		
Brooklyn Chamber of Commerce	Lori Raphael, Director of Real Estate and Development	
Carroll Gardens Coalition for Respectful Development (CORD)	Rita Miller	
Carroll Gardens Neighborhood Association	Maria Pagano, President	
Center for Urban Pedagogy	Christine Gaspar, Executive Director	X
Citizens of Pozzallo	John Heyer II, Chair, Public Relations Committee	
Cobble Hill Association	Elizabeth O. Velikonja, Executive Board member	x
Community Board 6	Craig Hammerman, District Mgr.	X
Fifth Avenue Committee	Michelle de la Uz, Executive Director	X
Friends and Residents of Greater Gowanus (FROGG)	Marlene Donnelly	X
Friends of Douglass/Greene Park, Inc.	Maria Pagano, Treasurer	
Gowanus Canal Community Development Corporation	Bill Appel, Exec. Director	
Gowanus Canal Conservancy	Hans Hesselein, Director of Special Projects	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 Association	Louis Kleinman	X
Our Lady of Loretto Council #585, Knights of Columbus	John Heyer II	
Park Slope Civic Council	Eric McClure, Trustee	X
Park Slope Neighbors	Eric McClure, Campaign Coordinator	X
Pratt Center for Community Development	Eve Baron, Senior Fellow for Planning and Policy	
Proteus Gowanus	Tammy Pittman, Director	
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	X
South Brooklyn Local Development Corporation	Bette Stoltz, Executive Director	
Southwest Brooklyn Industrial Development Corporation	Josh Keller, Executive Director	
Urban Divers Estuary Conservancy	Ludger K. Balan, Executive Director	
Wyckoff Gardens Tenants Association/Public Housing Communities, Inc.	Charlene Nimmons, President	

<b>At-Large Members:</b>			
Brendan Aguayo	Aguayo & Huebener Realty Group	Park Slope	x
Jerry Armer	President, 76 <sup>th</sup> 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	X
Lucy DeCarlo	CORD	Carroll Gardens	X
Anthony Deen	Gowanus by Design	Carroll Gardens	
Eymund Diegel	Various	Gowanus	
Stefan Doering		Gowanus	
Nathan Elbogen	XO Projects, The Old American Can Factory	Gowanus	x
Lou Femenella	76 <sup>th</sup> Precinct Community Council attendee	Carroll Gardens	
Emily Guyer	The ELM Group	Park Slope	
Andrew Jackson	Hudson Company	Gowanus	
Katia Kelly	Local blog, FROGG, CORD	Carroll Gardens	X
Linda LaViolette	Abutting property owner/business/resident, Nicholas Cabrini, Inc.	Gowanus	
Alex Lechich	US Coast Guard	Cobble Hill	
Alphonse Lembo	Monadnock Construction	Gowanus	
Margaret Maugenest	FROGG	Gowanus	
Steve Miller	CB6 committee member, FROGG, CORD, CGNA, Block by Block	Gowanus/Carroll Gardens	
Linda Mariano	FROGG	Gowanus	X
Abe Naparstek	Homeowner, various	Carroll Gardens	x
Lizzie Olesker	Friends of Bond, FROGG	Carroll Gardens/Gowanus	x
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	
Josh Skaller		Park Slope	