# Community Advisory Council September 10, 2015 Action Items/Notes



These notes are in the following order:

- 1. Attendance
- 2. Correspondence and Handouts
- 3. Administrative Items
- 4. Environmental Updates
- 5. Agenda Setting
- 6. Community Comment
- 7. BNL Campus Development Plan and Discovery Park

#### 1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: J. Anderson, L. Bates, S. Bogart, M. Castro, F. Crescenzo, W. Dorsch, D. Gibbs, T. Green, P. Genzer, R. Howe, M. Israel, S. Johnson, M. Maraviglia, G. Mattson, R. McKay, D. Paquette, V. Racaniello, R. Reeder, N. Sundin, R. Turk

### 2. Correspondence and Handouts

Items numbered one through four were mailed to Members with a cover letter dated September 3, 2015. Items numbered five and six were available as handouts at the meeting.

- 1. Draft agenda for September 10, 2015
- 2. Draft notes from the June 11, 2015 meeting
- 3. Member Contact Information update
- 4. CAC Organizations and Individual Members list
- 5. Environmental Updates presentation
- 6. BNL Campus Development Plan and Discovery Park presentation

#### 3. Administrative Items

The meeting was called to order at 6:30 PM. Reed Hodgin, facilitator, welcomed everyone to the 17<sup>th</sup> Anniversary meeting. He reviewed the ground rules and the draft agenda and noted there were several membership changes – Reinhardt Schuhmann, former Alternate is replacing Margaret Malloy as the primary APS representative. Malloy will become the Alternate for the Middle Island Civic Association, Tracy Adams is replacing Dr. Maria Castro as the primary representative for the Longwood Central School District, and Member Jordan-Sweet reported that Bruce Ravel will no longer serve as her Alternate (NSLS-II Users). Those in attendance introduced themselves. Hodgin asked the CAC members to be sure to return the request for emergency contact information that had been sent to them. Member Sprinzten asked for a correction to the organization listing for Al Krupski on the letterhead and on the list of organizations.

# **Approval of Minutes**

Hodgin asked for corrections, additions, or deletions to the June 11 draft notes. Member Giacomaro said there was an omission under Agenda Setting, he had asked for a presentation on new research at BNL in nanotechnology. Sundin said we would be conducting an agenda setting exercise next month. Member Jordan-Sweet had a correction to her correction last

month, on page two, it should state that 11,000 items were cataloged and many of them were removed. The notes were approved as amended, with none opposed, and two abstentions.

**4. Environmental Updates,** Jason Remien, Manager, Groundwater Protection Division. Jason Remien reported that the Environmental Protection Division had been extremely busy over the summer. He proceeded to update the CAC on the Building 811 demolition, the Peconic River supplemental sediment sampling, groundwater characterization at the Former Hazardous Waste Management Facility, and mentioned some future agenda topics.

Building 811, which operated from 1947 to 2008 was the Former Waste Concentration Facility. Remien reminded the CAC that the D tanks and AB waste lines had previously been removed and groundwater remediation in the area is on-going. He said that demolition of the building was nearly complete, removal of the foundation and soil is underway. They will perform a final radiological status survey to verify the work. The waste will be loaded and shipped by rail. Some of the concerns addressed during demolition were silica, rad, and asbestos (old wiring insulation).

Member Giacomaro asked about enclosing the area with plastic because of the asbestos. Remien said that the asbestos was non-friable, so the wetting they did was enough. They also monitored the air for the contaminants. There were no detects throughout the demolition.

Member Doroski noted that the waste from the BGRR and spent fuel pool was processed at Bldg. 811. He asked what radionuclides they were concerned about.

Remien said Sr-90 and Cesium-137. He also said as much of the risk as possible was addressed prior to demolition to minimize the possibility of a release. Piping was removed or grouted.

Doroski asked about waste from the Hot Lab (Bldg. 801).

Remien said the AB waste lines, previously removed, had come from Building 801.

Remien reviewed the areas of the Peconic River where mercury was cleaned up in 2004/2005 and pointed out WC-06 which is currently being sampled. WC-06, in Area D, is one of three areas that received supplemental cleanup in 2010/2011. Confirmatory sampling has shown the other areas have met the cleanup goals.

Since December, 91 samples taken in WC-06 have been analyzed. The samples were collected at five-foot intervals. The concentrations range up to 18 mg/kg, the average of the samples is 2.9 mg/kg. They will complete delineation of the contamination, review the results with the regulators, and determine the path forward. He said they would talk to the CAC about the findings.

Member Krupski asked for the source of the mercury contamination, who the regulators are, and who has the authority to deem it clean.

Remien explained that since the Lab took over the site in 1947 the sewage treatment plant has discharged to the river; last year the discharge was moved out of the river to groundwater recharge basins. The mercury is from past activities onsite. He said the regulators are the EPA, NYSDEC, and SCDHS. He explained the Interagency Agreement that is with the Department of Energy, EPA, and NYSDEC. Remien noted that the CAC had held many, many meetings and had a lot of input into the cleanup plan. The cleanup is the subject of a Record of Decision and cleanup goals. The regulators and the Records of Decision are ultimately telling us when we've completed the job.

Remien gave additional information on the past river cleanups and detailed the current effort to delineate the contamination found in WC-06.

Member Giacomaro asked if any fish samples were taken during this time period.

Tim Green said samples were taken just north and just south of this area this year before it dried up, the samples were all less than 1 mg/kg.

Member Kaplan asked if there was reason to believe that the highest levels are along the center line where there was flow and as you go out to the sides you get little or no detectable mercury, or if it is homogenous throughout this 15 to 20 foot width?

Remien replied there is a row with elevated concentrations and it isn't a very large area. There are sensitive areas such as the islands here that may have been cleaned up manually. So although this area was cleaned up it is possible that they didn't get all of it. You can see on the chart that none of the end point samples were taken down the middle between the islands so at that point we did not identify that there was the possibility of elevated mercury in this area. Also, after the sampling was completed, during restoration of the river there was a decision to not bring in outside soil, the existing sediment was used. There was movement of material around during that time.

Member Kaplan asked the depth of the samples.

Remien responded they were taken from the top six inches and he said that they will come back with an update after it is delineated.

Member Kaplan asked if it makes much sense to put this much effort into continued sampling when there was that much disturbance of the sediment during prior remediation. At that point things were moved around and scraped back during contouring and replanting. The Lab has made its best effort and the regulators have more or less approved, so now when you find a hot spot, there's no telling where it originally came from. And it's not really a hot spot in the greatest sense of the word either so wouldn't it just make sense to say it's done.

Remien said when we first started doing this we hoped it was a very small area; we haven't had that conversation with the regulators yet. This area is small and certainly the benefits and impact of removing that with machines would not be worth it. We're going to have more discussions with the regulators. Right now we want to make sure we have it delineated, we want to find out exactly where it is, and then we'll go from there.

Member Jordan-Sweet said it looks like the area where the sampling is the highest is just downstream of where you did the second remediation so are you thinking it's just from disturbing sediment and it got moved downstream?

Remien said it's possible, but when they were out there sampling, it's a deeper area, and it's possible they didn't go deep enough. This is a depositional area, the river is mostly dry, it's not like we have a huge flow of water moving things all over the place. These are questions we're asking ourselves, we'll come back and have more of a conversation.

Hodgin stated that the Lab is bringing you the information early as opposed for waiting for all the analysis to be done.

Member May asked about the areas offsite in red shown on the maps.

Remien said the red areas were areas that were cleaned up.

Member Murdocco asked if it would be worthwhile to test deeper into the soil.

Remien said they found that once they got down to the sand after the sediment was gone there was nothing.

Remien next reported on groundwater characterization at the Former Hazardous Waste Management Facility (FHWMF). He gave some background on the cleanup which was completed in 2005 and the post cleanup groundwater monitoring which is ongoing. He said that elevated concentrations of Sr-90 were found in two monitoring wells. In 2013, they made a recommendation to do additional sampling in this area. They are working to characterize the elevated levels by monitoring and will be doing some modeling based on the new data. They want to know where it is coming from and how large of an area it is, and what the concentrations will be when it reaches the site boundary which is about 3,000 feet away. Sr-90 moves 40 – 50 feet per year, it doesn't move fast.

Member Doroski asked what the MCL for Sr-90 was and if the media being used for the ion-exchange is specific for Sr-90 or would it remove other contaminants such as Carbon-14.

Remien said the drinking water standard is 8. There is no active treatment in this area; he didn't think that the media used at the other treatment facilities was specific for Sr-90, just effective.

Dorsch said the media they are using will also remove metals that have similar charges as Sr-90, when we installed these systems we had problems with calcium adhering to the resin and some other metals and once we cleared that out it was more effective. He said Cesium-137 is typically not mobile in groundwater. It adheres to the soil particles.

Member Sprintzen asked if this was expected to attenuate before it gets to the boundary.

Remien said we will characterize and do the modeling and have a good idea of what we're dealing with in the next couple of months. It moves very slowly.

Future environmental topics include a presentation on the 2014 Site Environmental Report (SER) in October. The Five-Year Review will also be on the agenda for October. The Five-Year Review is required by CERCLA as long as there are contaminants remaining; this will be the third Five-Year Review. The goal is to evaluate the implementation and performance of the remedies and whether they remain effective. Part of the Review involves interviews so we will be sending several questions out to you. We hope you will fill them out, but we will also talk about them in October.

Member Giacomaro asked to receive the questions ahead of time. The questions will be mailed out early and will also be sent out electronically.

Member Kaplan said he was curious about what goes on at the meetings with regulators (regarding FHWMF contaminants) because the highest values shown are in wells that are 500 to 1,000 feet from the border of the property and if the Strontium is migrating 40 to 50 feet per year further characterizing this doesn't make all that much sense in that you aren't going to see anything. So at some point how do you make the case that it's done? I'd like to get some insight on that perhaps at a future meeting.

Remien said they could do that. That's the kind of information that they talk about. We do want to make sure that we are doing the right thing as far as cleanup and that we look at all the options we have. One of them might be that we don't do anything; we characterize it and continue to monitor it.

In November, Bill Dorsch will give you an update on the Annual Groundwater Report and we'll probably have an update on what we just talked about. In December, Tim Green will give you an update on Cultural and Natural Resources including deer management and we may be talking to you about an Environmental Assessment (EA) for the Collider-Accelerator Department. The current EA for that facility is a little over 20 years old. They are planning some upgrades so we felt it was time to relook at the environmental impact of what they're doing.

Remien gave a brief update on deer management. He said a second cull is being planned for November. He also talked about the effectiveness of the 4-poster program and said that a comprehensive update will be provided in December.

# 5. Agenda Setting

Nora Sundin thanked Jason Remien for providing agenda items for the next few months. She said that an Agenda Setting exercise would be added to October's agenda.

### 6. Community Comment

Hodgin asked for comments from the community. Ray Keenan said in looking over the bylaws he noted that members need to reapply for membership every five years, which would be next year.

### 7. BNL Campus Development Plan and Discovery Park

Lanny Bates, Director, Campus Development, presented on the 10-year BNL campus vision and on Discovery Park. He reported that the focus was on key future investments in additional core building renovations to enable the Lab's scientific agenda. Bates told the CAC that the federal government over the last decade has invested over \$1.2 billion in facility construction at the Laboratory and he talked about the Lab's 4-part strategy to get the maximum value out of the investment. He said that Discovery Park is envisioned as a joint partnership with external public/private resources and that it would be a Gateway Zone for a Research Village that would fill gaps in site infrastructure renewal and operational efficiency and user amenities and housing. Bates explained that infrastructure renewal is critical to carrying out the DOE mission by providing optimal operation of the research enterprise. Discovery Park will provide 130,000 gsf of new office, administrative, and conference space, and 36,000 gsf of housing. It will enable the demolition of ~300,000 gsf of old and inefficient office and housing space. He provided additional information on the Space Reduction Plan and discussed attracting and growing the User community and leveraging commercial housing options. He said that AVR Realty may provide Executive Apartments in their Meadows complex across the highway if the need is there. He described the guest housing facility concept, regional considerations in the Discovery Park concept, and strategic partnerships. He said that Discovery Park repurposes a previously utilized property for minimal environmental impact and maximum commercial leverage. It will provide one stop for efficient User and visitor processing and provide open access to showcase DOE science and allow for community engagement. He outlined the project status and next steps which include creating a model for DOE over the next year to show how this would work.

CAC members asked questions about off campus development, plans for Users in areas other than RHIC and NSLSII, if the Lab had any interaction with the Tesla Museum, the possibility of rail service coming to the Lab, and shuttle service to the Lab from the Meadows.

Bates said there is a lot of State interest in what we're doing and we have an application in for some funding from them for the utility infrastructure of this project. The County's Innovation Zone proposal has a broad agenda for across the island. Part of the agenda is to look at how the island can create a more robust infrastructure to connect the mixed-use developments and rail is part of that. The County Executive has talked about creating a better train station in the area of the Laboratory to get better access.

Members also asked what would be funded privately, about the loss of control to commercial interests over the project if there is a public/private partnership in place (provisions would be built into the lease; existing housing would be phased out gradually as the need was met with new accommodations), would it be subject to local zoning (a long-term lease would retain the advantage of being a federal enclave), that a pub be included in the project, and if the location outside security perimeter of the Lab would be an issue.

The meeting adjourned at 9:04 PM.

Next meeting October 8, 2015.

# CAC Agenda Setting - May 8, 2014

### **PRESENTATIONS**

Pros & Cons of Bringing Back Commercial Nuclear Power - 12 (10/9/14 Bill Horak)

Holographic Principles of Quantum Mechanics - 8

Biological Research at BNL - 7 (5/14/15 C.J. Liu)

The Gamma Forest (where was it onsite; the kind of research done there) - 7

Survey of all DOE Labs - 6 (9/11/14- Frank Crescenzo)

Climate Science & W.H. Report (Steve Schwartz) - 5

NASA Research - 5

Waste Minimization at BNL – 5 (1/8/15 Peter Pohlot)

Update on Battery Storage – 5

More History - 4

Economic Impact of the Lab - 4

Nanotech Research, Safety, Environment, Ethics - 4

Fukushima - 4

Update on LI Solar Farm (production, environment) – 4

Research / Trends on Wildlife on LI - 3

Non Proliferation – 3

Patents & Commercialization - Pros & Cons of Science vs. Commercialization - 3 (6/11/15 Connie Cleary)

Update of Tick-borne Diseases – 3

Electric Grid (by J. Misewich) – 3

Update on G-2 - 3

Invite HS Students to Speak on Their Topics - 3

Update on State Program for Carbon Footprint Reduction (80x50?) – 2

Research towards Sustainability - 2

STEM Research Update (InSynC) - 2

Computer Facility for LHC/ATLAS / RHIC - 2

Research by Students at NSLS - Reach Out Program - 1

#### **TOURS**

ISB - 3 (6/12/2014)

				Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
					cancel					No mtg	No mtg	-			ļ
P = Present 2015 Affiliation		First Name	Last Name												
<b>ABCO</b> – Civic (Garber - 04/02) (Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan	Р		Р	Р	Р	Р			Р			
(Madigan -10/10)	Alternate	Michael	Madigan					Р	Р						
American Physical Society – Business & Labor	Member	Reinhart	Schuhmann	Р		Р		Р	Р			Р			
(Schuhmann 1/14, member 9/15)	Alternate														ļ
<b>Brookhaven Coalition of Chambers of Commerce</b> – Bus & Labor (added 6/15)	Member	Ron	Trotta						Р			Р			ļ
Brookhaven Retired Employees Association- BNL (Peskin - 09/09)	Member	Arnie	Peskin	Р		Р		Р	Р						
(Franz - 12/09)	Alternate	Eena-Mai	Franz	Р		Р	Р		Р						
(Shapiro-1/13)	Alternate	Steve	Shapiro									Р			
Citizens Campaign for the Environment – Advocacy & Environ	Member	Adrienne	Esposito	Р		Р		Р	Р						
, ,	Alternate														
Colonial Woods Whispering Pines – Civic (Birben - 06/09) (O'Neal 01/15)	Member	Cathy	O'Neal	Р		Р		Р							
(Rehbein -11/10)	Alternate	Eric	Rehbein				Р		Р			Р			
Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	Р		Р	Р	Р	Р			Р			
(Meade - 06/12, Jim M 10/12)	Alternate	Jim	Meade												
East Yaphank Civic Association	Member	Michael	Giacomaro	Р		Р	Р	Р	Р			Р			
(Feinman - 02/09)	Alternate	Bob	Feinman	Р		Р									
Emeritus (added 12/14)	Member	Don	Garber	Р		Р	Р	Р	Р						
Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt												
Foundation for Economic Education – Ed, Sci, & Tech (5/14)(Martin – 10/14)	Member	Bruce	Martin			Р	Р	Р	Р			Р			
(Edwards – 10/14)	Alternate	Estelle	Edwards												
(Pratka – 10/14)	Alternate	Craig	Pratka	Р				Р	Р						
Friends of Brookhaven- BNL (Kaplan - 07/01)	Member	Ed	Kaplan			Р			Р			Р			
(Schwartz - 11/02)	Alternate	Steve	Schwartz	Р		Р		Р							ļ
Huntington Breast Cancer Coalition – Health-Based Rep	Member	Mary Joan	Shea	Р		Р		Р	Р						
	Alternate	Scott	Carlin												
IBEW/Local 2230 (Krsnak 01/07) (Removed 3/15)	Member	Scott	Krsnak												
	Alternate														
Individual (changed 3/12)	Member	Karen	Blumer			Р	Р	Р	Р						
(added 6/12)	Alternate	Michael	Madigan	Р		Р									
Individual – (changed 3/12)	Member	Jane	Corrarino			Р		Р							
	Alternate														

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P = Present 2015 Affiliation		First Name	Last Name							9	9				
Individual – (changed 3/12)	Member	Iqbal	Chaudhry	Р		Р			Р						
	Alternate														
L.I. Pine Barrens Society – Advoc & Env	Member	Richard	Amper					Р							
(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)(Muether added – 5/15)	Alternate	Katie	Muether			Р	Р	Р	Р			Р			
L.I. Progressive Coalition – Advoc & Env	Member	David	Sprintzen	Р		Р	Р		Р			Р			
	Alternate														
Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss	Р			Р		Р			Р			
(Grandal - 10/10)	Alternate	Bonita	Grandal	Р					Р			Р			
Longwood Central School Dist Ed, Sci, & Tech (Castro -06/09)(adams 9/15)	Member	Tracy	Adams	Р		Р						Р			
(Gerstenlauer removed & Sterne added 5/14 removed 9/15)	Alternate														
Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano	Р		Р		Р	Р						
	Alternate	Clara	McManus												
	Alternate	Joe	May									Р			
Middle Island Civic Association	Member	Tom	Talbot	Р					Р			Р			
(Nowak 01/15 – 5/15)(Malloy 9/15)	Alternate	Margaret	Malloy	Р		Р	Р	Р							
NSLS-II User Committee – BNL	Member	Jean	Jordan-Sweet				Р	Р	Р			Р			
(Ravel -02/11-9/15)	Alternate			Р											
Ridge Civic Association (Henagan removed 9/15)(Chattaway added 10/15)	Member	Wesley	Chattaway	Р		Р	Р	Р	Р						
Suffolk County Legislature 1 <sup>st</sup> Dist Government (added 6/15)	Member	Al	Krupski						Р			Р			
	Alternate	John	Stype												
Teachers Federal Credit Union – Bus & Labor (Murdocco 3/15)	Member	Richard	Murdocco			Р		Р	Р			Р			
	Alternate	Suzanne	Gillan						Р						
Town of Brookhaven (Graves - 06/06) (removed 1/2015)	Member	Anthony	Graves												
	Alternate														
Town of Brookhaven, Senior Citizens Office - Government	Member	James	Heil	Р		Р	Р	Р	Р			Р			
	Alternate														
Town of Riverhead - Government (Doroski - 04/11)	Member	Isidore	Doroski	Р		Р		Р	Р			Р			
(Hulme - 04/11 - 4/14)	Alternate	-													
Wading River Civic Association	Member	Helga	Guthy	Р		Р	Р	Р	Р			Р			
	Alternate	Sid	Bail												