# Community Advisory Council November 4, 2010 Action Items/Notes



These notes are in the following order:

- 1. Attendance
- 2. Correspondence and Handouts
- 3. Administrative Items
- 4. BGRR/HFBR Decommissioning Projects, Chuck Armitage, Environmental Restoration Projects
- 5. Agenda Setting
- 6. Community Comment
- 7. NSLS InSynC Program, Scott Bronson, Office of Educational Programs, Lisa Miller, and Tony Lanzirotti, Photon Sciences
- 8. 2009 SER Highlights, Robert Lee, Environmental Protection Division

### 1. Attendance

Members/Alternates Present: See Attached Sheets.

### Others Present:

M. Arens, C. Armitage, S. Aronson, M. Bebon, P. Bond, S. Bronson, F. Carlson, J. Carter, N. Detweiler, S. Feinberg, K. Geiger, D. Gibbs, M. Israel, S. Johnson, S. Kumar, A. Lanzirotti, R. Lee, R. Lincoln, M. Lynch, L. Lyons, M. Malloy, P. Maniscalco, R. McKay, L. Miller

# 2. Correspondence and Handouts

Items numbered one and two were mailed with a cover letter dated October 28, 2010. Items numbered three and four were placed in the Members' folders and items five through seven were available as handouts at the meeting.

- 1. Draft agenda for November 4
- 2. Draft notes for October 14
- 3. BGRR/HFBR Decommissioning Projects presentation
- 4. 2009 Site Environmental Report presentation
- 5. Copies of the 2009 Site Environmental Report
- 6. RHIC pamphlet, *An Exciting Beginning and a Compelling Future*
- 7. InSynC brochure, Bringing Big Science to Classrooms

# 3. Administrative Items

The meeting began at 6:34 p.m. Reed Hodgin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Dr. Sam Aronson, Lab Director, addressed the CAC regarding the request from Peter Maniscalco that the Laboratory invite a Native American Indian to perform a ceremony on site in honor of the trees before they are cut down for the Long Island Solar Farm (LISF). He sent a letter to Maniscalco explaining that it is the policy of the Laboratory that any function requested to be held on the Lab site by an outside organization or individual must be related to the Lab's mission. Because this proposal does not meet this requirement, BNL declined the request. He said the CAC gave him some valuable input on this topic and he was grateful for that.

Member Blumer asked what part of the Lab's mission the request did not meet.

Dr. Aronson said the Lab's mission statement is part of the Strategic Plan for the Laboratory and is vetted with the Office of Science and Department of Energy. He explained that the Lab's vision is what we want to be as an institution, the mission is what we want to do as an institution, and the strategy is how we want to do it. The two parts of the mission statement are: To advance photon sciences in energy and environment related research and apply them to 21<sup>st</sup> century problems of critical importance to the Nation; and, To advance fundamental research in nuclear and particle physics to gain a deeper understanding of matter, energy, space, and time.

Member Sprintzen requested a presentation on the Lab's vision, mission, and strategy.

Dr. Aronson said he can arrange to do that.

The CAC agreed that they are interested in hearing that presentation.

Reed asked members that had gone on the tour of the NSLS-II construction site in October to share their experience.

Member Sprintzen said the building is impressive in size and complexity.

Member Bush said he enjoyed it very much and was interested in more tours of the different facilities.

Member Guthy said she also enjoyed it and the way it was explained. She is very excited about the possibilities.

Member Castro said it was an awesome experience. She was impressed with the thickness of the walls.

Member Chaudhry was awestruck by the magnitude and felt very proud that BNL is doing so much research and proud to be a small part of it.

Reed asked if the CAC is interested in a presentation on the physics of the Light Source and how it works.

The CAC said they would.

Doon Gibbs, Deputy Director for Science and Technology, said when it's done the Light Source will not be the biggest, but it will be the brightest. It's 10,000 times brighter than the current Light Source.

### Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the October 14, 2010 draft notes. Member Blumer said that on page 5 she would like her comment to read, "Yes they are a perfect choice if allowed to self restore and remain under two feet tall". Member Chaudhry said that on page 2 the words than and the Tandem Van de Graaf were misspelled. The notes were approved as amended with no one opposed and four abstentions.

# 4. BGRR/HFBR Decommissioning Projects – Chuck Armitage, Director, Environmental Restoration Projects

Chuck Armitage gave an overview on the graphite removal process and the completion celebration. He described preparations for the removal of the biological shield and progress on the installation of the engineered cap at the Brookhaven Graphite Research Reactor (BGRR). He said that the biological shield should be removed and the environmental cap and monitoring system installed by June 2011. The BGRR ROD End State should be achieved by September 2011.

Armitage also spoke about the High Flux Beam Reactor stabilization, underground utilities, fan houses, and stack. The stack demolition contract has been awarded and contractor mobilization is underway. A mast climber system and a support work platform has been installed with a hoist system to move equipment and personnel. The Confinement Building stabilization was completed and shifted to a long-term maintenance state on August 25, 2010. Demolition of the large Fan House (Bldg. 704) was completed in October 2010. The underground utilities should be completed in February 2011. The stack demolition is scheduled to start this month and be completed by February 2011. The demolition of the smaller Fan House (Bldg. 802) associated with the stack is set to start in January and expected to be completed by April 2011. Additional ARRA funding has been awarded due to the success so far; this has accelerated the cleanup.

Member Sprintzen asked what is going to be done with the equipment after the cleanup is completed.

Armitage said it will be decontaminated and then we will look for a place where it can be reused. It is not activated, controls are in place to prevent any radiological problems and there have been none so far.

Member Sprintzen asked how it is decontaminated.

Armitage said a fixative is applied and then the machinery is wiped down. The contamination is on the surface.

Member Kaplan asked what happens to the workers when the job is finished.

Armitage said they will move on to other projects.

Member Chaudhry asked what the engineered cap is made of.

Armitage said it is made of clay, soils, a membrane, and asphalt. The layers are to prevent water intrusion. There is still contamination under the building so the cap seals it in place. It's part of the cleanup remedy in the Record of Decision.

Member Talbot asked what the projected schedule for complete removal is, based on decay rates.

Armitage said 65 years based on the half life decay of the materials. This will be reassessed every five years.

Member Esposito said this is a job well done by the Lab. We should celebrate.

Armitage said the ARRA funding has accelerated the work and allowed this to happen ahead of schedule.

Member Guthy said she would love to meet the people that worked on the reactor and celebrate with them.

Armitage said a lot has been accomplished, but we are not done yet.

Member Blumer asked how much CAC input went into all this.

Armitage said the CAC was in the middle of the discussions before he came to the Lab, their input was significant.

Member Esposito said she was on the subcommittee with other CAC members and it was very intense and challenging. The Laboratory deserves a lot of credit for working with us. I think that the CAC had a lot to do with it. The early plan was to entomb the reactor for 87,000 years and when you go from that to having it all done by next year, that's a dramatic difference.

Armitage said the New York State Department of Environmental Conservation, the EPA, and the County Department of Health Services were involved also.

Member Blumer asked if there were any other contaminants or radiation and if any had escaped during the life of the project. Are they part of any plumes?

Armitage said it was mostly radiological contamination. There is some lead, beryllium, and tritium, which are all being monitored. There have been no releases to the environment during the cleanup process.

Member Kaplan asked to what extent the Lab has publicized the tasks and accomplishments that have been made.

Armitage said this is an incredible opportunity and would be a good story to tell. It has not been done, but that is a good idea.

### 5. Agenda Setting

Nora Detweiler, new liaison to the CAC, said she is pleased to be working with the CAC. She has included her contact information in their folders and they should feel free to contact her at any time. She then said the December holiday party will be held in the Science Learning Center and the meeting will be held at 7 p.m. at Berkner Hall. Jean Jordan-Sweet will give a presentation on the Light Source. Detweiler said a SPDES update should be ready in January.

Member Peskin said he would like to see a discussion on the Strategic Plan on the agenda.

Detweiler said she will make sure it gets on a future agenda.

Member Blumer asked that an agenda topic to clarify the aspects of the utility solar array and the protocol with DOE and certain other aspects of that be included on the agenda.

Member Talbot asked for a presentation on Homeland Security regarding methods of detecting radioactivity in shipping containers.

Reed said the process is to identify agenda topics and then vote as a group and prioritize them. Perhaps in January we can do that and set up future agenda topics. He also suggested that the Lab set up some orientation for new members.

Member Blumer asked about a presentation on the charter.

Member Kaplan said he is interested in archiving and documenting what has happened at the CAC. He said there have been enormous changes in the atmosphere between the Lab and stakeholders. This should all be recorded and made public.

Member Blumer said it is stated in the charter that the Lab will provide a written response to each recommendation. She would like to see that documented.

Member Esposito said it is important that new members learn the history of the CAC.

### 6. Community Comment

Peter Maniscalco, environmental activist and educator, addressed the CAC. He congratulated the Laboratory on their efforts to change the culture. He said last month he asked the Lab for permission to hold a ceremony for the 15,000 trees that will be cut down for the Long Island Solar Farm. His proposal was denied and he would like the CAC to ask Dr. Aronson to reconsider. He does not understand how this can violate the mission statement of the Laboratory. If we don't learn to honor other species, we eventually will not honor ourselves.

Reed said if the CAC would like to put the topic on the agenda for further discussion, we can do that.

Member Blumer asked if she could find out from Mike Holland, Department of Energy Site Office Manager, if the solar project is actually going to happen and if so, could that discussion be put on a future agenda.

Reed said a vote of 2/3 of the group is needed to agree to put this on the agenda for additional discussion. The agenda question asked was "should an item be placed on agenda next month so that the CAC can consider making a recommendation to the Laboratory Director concerning the ceremony honoring the trees." The vote was 6 CAC members in favor and 10 opposed, with no abstentions. The vote did not carry with a 2/3 margin, so it will not go on the agenda.

# 7. NSLS InSynC Program – Scott Bronson, Educational Programs Administrator, Office of Educational Programs, Lisa Miller, Associate Div. Director, Photon Sciences, and Tony Lanzirotti, Chair, Ex. User's Comm., Photon Sciences

Scott Bronson explained that InSynC is a program to enable high school teachers and students to gain remote access to synchrotron beamtime through a competitive, peer-reviewed proposal process. The program will train both teachers and students to formulate a hypothesis-driven scientific problem and learn the skills of writing a competitive beamtime proposal. This program is supported and funded by the NSLS and DOE's Office of Workforce Development for teachers and scientists (WDTS) to enhance science education at the high school level. Any high school can participate. This program will start locally and it is anticipated that it will be extended to a nationwide competition and involve all US synchrotrons.

Lisa Miller said she would like everyone in the room to take this information to their home community and teachers. She said there is a three-day training course for teachers. The teachers then formulate a hypothesis and experiment with their students and submit that. It then undergoes a peer review, where the proposal receives a 1 - 4 rating. The proposal with the highest rating is scheduled for beamtime.

Miller said there were about 30 educators at the first training session in July 2010. The first proposals were submitted in October. The review has just been completed by a panel of synchrotron scientists with expertise in education and outreach. Some examples of the proposals are: Collection and Analysis of Micrometeorites, Effectiveness of Household Water Filters, Chemistry of Biofilms, and Structural Biology. Initially, there will be 1 - 2 days of beamtime per cycle allocated on three beamlines at the NSLS. As additional beamlines are outfitted, more beamtime will be made available.

Tony Lanzirotti said that a large number of beamlines here at BNL are operated by other universities, government agencies, and other industry groups. He works and lives here but is employed by the University of Chicago. He explained that the students and teachers will have remote access from the classroom. This program will provide research experience to entire classrooms rather than individual students. So far there are 19 school districts participating.

Member Castro said she attended the May 24<sup>th</sup> *Bringing Big Science Into the Classroom* workshop with five high school teachers and said they are all very excited to be part of this program.

Member Sprintzen asked for a copy of the presentation and if anyone has reached out to schools further west.

Bronson said there is another workshop in the spring and there is funding to bring in teachers from as far away as upstate NY.

Member Kaplan said Bravo! You need to be careful to distinguish between work done by the student versus the mentor. This equipment is quite sophisticated so I assume someone here at BNL is responsible for it. What does this cost?

Lanzirotti said the interaction with scientists is important. There is a review panel that looks closely at what the student actually did.

Miller said the beams are complicated. It's all automated, the younger generation gets it. There is no cost associated with this program because it is based on a peer review proposal process. Tax dollars are paying for it.

Member Blumer asked who is funding the program.

Bronson said DOE has given a grant to BNL for the program.

Member Kaplan asked if the school has to make an investment in order to participate.

Bronson said the hardware is part of our funding. They would need an eyeball camera and an echo cancelling device.

Lanzirotti said it all goes through your web browser.

### 8. SER Highlights – Robert Lee, Interim Manager, Environmental Protection Division

Robert Lee explained the purpose of the Site Environmental Report (SER). He said it is required by DOE, is an official record of BNL's environmental impact for the calendar year, and serves as the principal environmental communications vehicle. It is available as a downloadable file on the BNL web page, in hardcopy, and as a summary booklet that includes a CD version of the full report, including SER Volume II, the Groundwater Status Report.

He said topics of interest are brought to the CAC's attention well before the SER is published. He spoke about the Environmental Management System, Pollution Prevention Program, Waste Generation, energy conservation, compliance status, inspections and assessments, water monitoring, air monitoring, and dose monitoring.

Member Jordan-Sweet asked if there is a distinction between spills that are considered normal to any industry and those that are unique to the Laboratory when reporting them.

Lee said most are industry related.

Member Jordan-Sweet asked why the minimum detection limits for water monitoring results fluctuate.

Lee said the background count will vary.

Member Guthy said the DEC is very strict with BNL. Are they strict with other companies as well? Do they have to lower their energy consumption also? Is private industry following the lead?

Lee said DOE has set goals for federal facilities, but a lot of companies are trying to reduce their carbon footprint.

Member Kaplan asked who is responsible if a contractor causes a spill.

Lee said usually the Lab takes responsibility, but we have the option of back charging them.

Reed said if the CAC needs a more in-depth review at a future meeting, please let us know. He then asked Mike Holland if the Long Island Solar Farm project had been cancelled.

Holland said no, it is ongoing. LIPA's project to build the solar farm with BP Solar is taking place here at the Laboratory as planned.

The meeting adjourned at 9:29 p.m.

			Jan	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
P = Present 2010 Affiliation		First Name	Last Name		(canc elled)										
ABCO (Garber added on 4/10/02)	Member	Don	Garber	Р		Р	Р	Р	Р				Р		
ABCO (Madigan added 10/10)	Alternate	Michael	Madigan					1					Р	Р	
Brookhaven Retired Employees Association (Peskin replaced Campbell 09/09)	Member	Arnie	Peskin			Р	Р	Р	Р					P.	
Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)(Franz 12/09)	Alternate	Eena-Mai	Franz				P	P	P			Р	Р	P	
CHEC (Community Health & Environment Coalition (added 10/04)	Member	Sarah	Anker	Р		Р	Р	Р	Р				Р	Р	
(added 12/08) (R. Andrejkovics removed 9/09)	Alternate														
Citizens Campaign for the Environment	Member	Adrienne	Esposito	Р		Р	Р	Р	Р			Р	Р	Р	
Citizens Campaign for the Environment (Ottney added 4/02- taken off 1/05 Mahoney put on)(7/06 add Kasey Jacobs)(K. Jacobs off 1/08)	Alternate														
Colonial Woods Whispering Pines (added 06/09)	Member	Christine	Birben	Р		Р	Р	Р	Р			Р	Р	Р	
Colonial Woods Whispering Pines (added 09/09)(Rehbein added 11/10)	Alternate	Eric	Rehbein											Р	
E. Yaphank Civic Association	Member	Michael	Giacomaro	Р		Р	Р	Р	Р						
E. Yaphank Civic Association (J. Minasi new alternate as of 3/99) (M. Triber 11/05) (Munson 6/06) (Feinman 2/09)	Alternate	Bob	Feinman	Р		Р	Р	Р	Р						
Educator (changed 7/2006)(Bush member 5/10)	Member	Greg	Bush			Р	Р	Р					Р	Р	
Educator (B. Martin - 9/01)	Alternate	Bruce	Martin										Р		
Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02) (changed 7/2006)(Bush 5/09)	Alternate	Adam	Martin												
Fire Rescue and Emergency Services	Member	Joe	Williams												
Fire Rescue and Emergency Services	Alternate	Don	Lynch												
Fire Rescue and Emergency Services	Alternate	James	McLoughlin												
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)	Member	Ed	Kaplan			Р								Р	
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(Schwartz added 11/18/02)	Alternate	Steve	Schwartz					Р	Р						
Health Care	Member	Jane	Corrarino												
Health Care	Alternate														
Huntington Breast Cancer Coalition	Member	Mary Joan	Shea			Р	Р	Р	Р			Р	Р		
Huntington Breast Cancer Coalition	Alternate	Scott	Carlin												

				Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
P = Present 2010 Affiliation		First Name	Last Name	- and	(canc elled)	ai	, 16.		o anto		, lug	Cop			200
Intl. Brotherhood of Electrical Workers/Local 2230 (S.Krsnak								_	_						
replaced M. Walker 1/11/07)	Member		Krsnak				Р	Р	Р						
IBEW/Local 2230	Alternate	Philip	Pizzo												
L.I. Pine Barrens Society	Member	Richard	Amper	Р											
L.I. Pine Barrens Society (added P. Loris 6/05)(Alayeva off 6/08) (Itriyeva 02/09) (Motschenbacher 6/09)	Alternate	Beth	Motschenbacher			Р	Р	Р				Р	Р	Р	
L.I. Progressive Coalition	Member	David	Sprintzen	Р			Р	Р				Р	Р	Р	
L.I. Progressive Coalition	Alternate	None	None												
Lake Panamoka Civic Association (Biss as of 4/02)	Member	Rita	Biss	Р		Р	Р	Р				Р	Р		
Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99) (Gibbons off 1/10)(Grandel added 10/10)	Alternate	Bonita	Grandel										Р		
Long Island Association (Groneman replace 10/05)	Member														
Long Island Association	Alternate	William	Evanzia												
Longwood Alliance	Member	Tom	Talbot	Р		Р	Р	Р	Р			Р		Р	
Longwood Alliance	Alternate	Kevin	Crowley												
Longwood Central School Dist. (switched 11/02)(Castro replaced Henigin 6/09)	Member	Maria	Castro	Р		Р	Р	Р	Р				Р	Р	
Longwood Central School Dist.	Alternate	Allan	Gerstenlauer												
NEAR	Member	Jean	Mannhaupt			Р	Р	Р	Р						
NEAR (prospect taken off ¾) (Blumer added 10/04)	Alternate	Karen	Blumer			Ρ						Р	Р	Р	
NSLS User	Member	Jean	Jordan-Sweet	Р			Р	Р	Р				Р	Р	
NSLS User	Alternate	Peter	Stephens												
Ridge Civic Association	Member	Pat	Henagan	Р		Ρ	Р					Р	Р	Р	
Science & Technology (added 1/13/05)	Member	lqbal	Chaudhry			Р	Р	Р	Р			Р	Р	Р	
Town of Brookhaven (Graves made member 6/06)	Member	Anthony	Graves	Р		Ρ	Р	Р	Р					Р	
Town of Brookhaven (Ormond 9/10)	Alternate	Luke	Ormand									Р	Р		
Town of Brookhaven, Senior Citizens	Member	James	Heil	Р		Р	Р		Р			Р	Р		
Town of Brookhaven, Senior Citizens (open slot as of 4/99)	Alternate														
Town of Riverhead	Member														
Town of Riverhead (K. Skinner alternate as of 4/99)	Alternate	Kim	Skinner												
Wading River Civic Association	Member	Helga	Guthy	Р		Р	Р	Р				Р	Р	Р	
Wading River Civic Association	Alternate	Sid	Bail												