

**Community Advisory Council
November 14, 2013
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. The “Hot” (and Cold) Science of RHIC – Looking back to the dawn of time to explore the origins of mass and matter and the evolution of our universe, Berndt Mueller, Associate Lab Director for Nuclear & Particle Physics
5. Community Comment
6. Agenda Setting
7. 2012 Site Environmental Report (SER), Jason Remien, Interim Manager, Environmental Protection Division

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: J. Anderson, M. Bebon, S. Bogart, J. Carter, F. Crescenzo, N. Detweiler, B. Dorsch, D. Gibbs, G. Goode, E. Governale, S. Johnson, M. Lynch, R. McKay, D. Paquette

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated November 7, 2013. Items three through five were available as handouts at the meeting.

1. Draft agenda for November 14 2013
2. Notice for change of meeting location
3. Copy of presentation: The “Hot” (and Cold) Science of RHIC – Looking back to the dawn of time to explore the origins of mass and matter and the evolution of our universe, Berndt Mueller, Associate Lab Director for Nuclear & Particle Physics
4. Copy of presentation: 2012 Site Environmental Report (SER), Jason Remien, Interim Manager, Environmental Protection Division
5. Copies of the full 2012 SER

3. Administrative Items

The meeting was called to order at 6:34 pm. Nora Detweiler, liaison to the CAC, facilitated the meeting because Reed Hodgkin was unable to attend. She reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Approval of Minutes

Detweiler asked for corrections, additions, or deletions to the September 12, 2013 draft notes. Member Chaudhry said that on page one, the word “*be*” was missing from the comment by Bill Dorsch. The notes were approved as amended.

BNL Director Doon Gibbs introduced Jack Anderson, the Laboratory’s new Deputy Director for Operations. Jack Anderson said it was pleasure to join Brookhaven and thanked Gibbs for the opportunity and said he was excited to be here.

4. The “Hot” (and Cold) Science of RHIC – Looking back to the dawn of time to explore the origins of mass and matter and the evolution of our universe.

Gibbs introduced Berndt Mueller, Associate Laboratory Director for Nuclear & Particle Physics, as this was his first presentation before the CAC. Mueller explained that the Relativistic Heavy Ion Collider (RHIC), the only collider operating in the US, looks back on the dawn of time to explore the origins of mass and matter and the evolution of the universe. He said that quarks and gluons make up 99 percent of the mass of visible matter and they are nearly impossible to study because they are locked inside protons, neutrons, and nuclei. RHIC has the ability to accelerate bits of matter and steer them into head-on collisions. Detectors, computers, and scientists capture the action. There are over 1,000 collaborators around the world who figure out what questions to ask of all that data. Experiments at RHIC found that quark-gluon plasma is a liquid, which was quite unexpected. There is no other known liquid with such a low value and scientists want to learn more about how it works. RHIC is the world’s only polarized proton collider which has enabled detailed exploration of a long-standing physics mystery: missing proton “spin”. We can learn a lot by looking back, but we also want to look at early stages directly with an electron-ion collider (eRHIC). Upgrades will make RHIC more powerful and will leverage Brookhaven’s scientific and technical expertise.

Member Jordan-Sweet asked about funding for eRHIC.

Mueller said it is not funded yet. We are working with scientists around the world. BNL is studying ways to build an affordable machine. We are hoping to start the funding process (CD-0) in 3-4 years. Our plan is to run RHIC until 2022, then shut it down and start building eRHIC, which will hopefully be operational in 2025.

5. Community Comment

There was no community comment

6. Agenda Setting

Detweiler said that in December, Bill Dorsch will give the Annual Groundwater Report and Eric Stach will present on the CFN. She said there will also be upcoming presentations on Natural Resource Management, the Site Sustainability Plan, and Cultural Resources Management. She then asked if the CAC had any requests.

Member Shea asked for an update on Fukushima.

Member Ziems asked for information on what is going on at the new Interdisciplinary Science Building and for a tour in the spring.

Detweiler said a tour of the ISB would be great.

Detweiler said there will also be an update on the SPDES permit next month and that George Goode is working on a presentation that will be an overview of all the cleanup activities.

Member Schwartz said the CAC passed a resolution at its September meeting expressing its appreciation and thanks to Mike Bebon for his many years of service. Schwartz read the resolution and presented a copy to Bebon along with a copy of the 15th Anniversary CAC photo.

Bebon thanked all the members of the CAC.

7. 2012 Site Environmental Report (SER)

Jason Remien, Interim Manager, Environmental Protection Division, explained that the SER is required by DOE and prepared in accordance with a DOE order. It is the 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 webpage, in

hardcopy, and as a summary booklet that includes a CD version of the full report, including SER Volume II, Groundwater Status Report. Many of the topics have already been covered at CAC meetings. Remien spoke about the Environmental Management System (EMS), Pollution Prevention Program (P2), waste generation, and energy management and conservation. He gave an overview of the Lab's compliance status and spoke about inspections and assessments, water quality monitoring, air quality (radiological and non-radiological), and spoke about radiological dose assessment.

Member Shea asked what the natural background levels for this area for air and water are, and if they are listed in the SER.

Remien said the Lab compares its' levels to the local background levels.

Member Shea said it would be helpful to know what the local natural background levels for the area are.

George Goode said there are references that we can share with you that show natural background in various areas.

ACTION ITEM: Send out the natural background levels of radiation for air and water for the local area.

Member Jordan-Sweet asked about the stack drain tank and if it is kept empty by shipping the rainwater collected offsite. How many gallons go down the stack drain tank on average per year?

Remien said he doesn't have the amount in gallons but can get it. It is sent out as Rad waste.

ACTION ITEM: Find out the number of gallons that were collected from the Stack Drain Tank in 2012.

The meeting adjourned at 8:56 p.m.

Agenda Topics Exercise
April 11, 2013

Biological Research at BNL - 8
~~Cyber Security & BNL~~ – 7 (May 9, 2013)
~~Ticks & Tick Research~~ – 8 (June 13, 2013)
Quantum Physics - 7
Battery Advances & Research - 6
Nanotechnology - 7
BNL & Higgs Boson - 4
Progress Report on Blueprint - 4
~~Update on Solar Farm~~ – 5 (June 13, 2013)
Sustainability - 4
Impacts of Politics on Science - 4
Computational Science - 3
Overview of Science Programs at ISB - 4
Update on Fukushima – Lab Work – 3
Nuclear Safety - 3
~~Physics Research at BNL~~ – 2 (November 14, 2013)
Intellectual Property - 2
~~Tree Bronzing~~ – 1 (June 13, 2013)
Fluctuations in Vacuum - 1
Impact of Fukushima Radiation - 1

P = Present	2013	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct cancelled	Nov	Dec
		ABCO (Garber - 04/02)	Member	Don	Garber												
		(Madigan -10/10)	Alternate	Michael	Madigan	P			P	P							
		American Physical Society	Member	Margaret	Malloy	P		P	P	P	P					P	
			Alternate														
		Brookhaven Retired Employees Association (Peskin - 09/09)	Member	Arnie	Peskin			P	P	P	P			P		P	
		(Franz - 12/09)	Alternate	Eena-Mai	Franz		P	P			P			P			
		(Shapiro-1/13)	Alternate	Steve	Shapiro	P											
		Citizens Campaign for the Environment	Member	Adrienne	Esposito		P	P	P	P				P			
			Alternate														
		Colonial Woods Whispering Pines (Birben - 06/09)	Member	Christine	Birben		P		P	P	P						
		(Rehbein -11/10)	Alternate	Eric	Rehbein	P	P			P	P			P			
		Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	P	P	P	P	P	P			P		P	
		(Meade – 06/12, Jim M 10/12)	Alternate	Jim	Meade												
		East Yaphank Civic Association	Member	Michael	Giacomaro	P	P	P	P	P				P		P	
		(Feinman - 02/09)	Alternate	Bob	Feinman	P	P	P	P	P	P			P			
		Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt												
		Friends of Brookhaven (Kaplan - 07/01)	Member	Ed	Kaplan	P		P			P					P	
		(Schwartz - 11/02)	Alternate	Steve	Schwartz			P		P				P		P	
		Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	P		P		P				P		P	
			Alternate	Scott	Carlin		P										
		IBEW/Local 2230 (Krsnak 01/07)	Member	Scott	Krsnak	P											
			Alternate														
		Individual (changed 3/12)	Member	Karen	Blumer												
		(added 6/12)	Alternate	Michael	Madigan			P			P						
		Individual – (changed 3/12)	Member	Greg	Bush												
			Alternate	Adam	Martin												
			Alternate	Bruce	Martin									P		P	
		Individual – (changed 3/12)	Member	Jane	Corrarino			P									
			Alternate														
		Individual – (changed 3/12)	Member	Iqbal	Chaudhry	P		P	P		P			P		P	
			Alternate														

P = Present	2013	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct <small>cancelled</small>	Nov	Dec
		L.I. Pine Barrens Society	Member	Richard	Amper	P	P							P			
		(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)	Alternate	Katie Rose	Leonard	P		P	P		P			P		P	
		L.I. Progressive Coalition	Member	David	Sprintzen	P		P	P	P	P			P		P	
			Alternate														
		Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss					P	P						
		(Grandal - 10/10)	Alternate	Bonita	Grandal		P			P	P						
		Longwood Central School Dist. (Castro -06/09)	Member	Maria	Castro									P			
			Alternate	Allan	Gerstenlauer												
		Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano			P			P						
			Alternate	Clara	McManus												
			Alternate	Joe	May					P							
		Middle Island Civic Association	Member	Tom	Talbot	P	P	P			P			P		P	
			Alternate	Kevin	Crowley												
		NSLS Users Committee	Member	Jean	Jordan-Sweet	P	P	P	P					P		P	
		(Ravel -02/11)	Alternate	Bruce	Ravel						P			P			
		Ridge Civic Association	Member	Pat	Henagan	P	P	P	P		P			P		P	
			Alternate														
		Town of Brookhaven (Graves - 06/06)	Member	Anthony	Graves												
			Alternate														
		Town of Brookhaven, Senior Citizens Office	Member	James	Heil	P		P		P	P			P			
			Alternate														
		Town of Riverhead (Doroski - 04/11)	Member	Isidore	Doroski	P			P	P				P		P	
		(Hulme - 04/11)	Alternate	Suzanne	Hulme			P		P							
		Wading River Civic Association	Member	Helga	Guthy		P	P	P	P						P	
			Alternate	Sid	Bail												