Community Advisory Council November 13, 2014 Action Items/Notes

These notes are in the following order:

- 1. Attendance
- 2. Correspondence and Handouts
- 3. Administrative Items
- 4. Membership Vote
- 5. Environmental Updates
- 6. Annual Groundwater Update
- 7. December Agenda setting
- 8. Community Comment

## 1. Attendance

Members/Alternates Present: See Attached Sheets.

<u>Others Present</u>: S. Bogart, J. Carter, D. Garber, L. Garber, P. Genzer, D. Gibbs, T. Green, R. Howe, M. Israel, S. Johnson, M. Maraviglia, G. Mattson, R. McKay, R. Murdocco, J. Remien, N. Sundin

#### 2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated November 6, 2014. Items numbered three and four were available as handouts at the meeting.

- 1. Draft agenda for November 13, 2014
- 2. Draft notes from the October 9, 2014 meeting
- 3. Presentation Environmental Updates
- 4. Presentation Annual Groundwater Update

## 3. Administrative Items

The meeting was called to order at 6:32 PM. Reed Hodgin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Doon Gibbs, Laboratory Director, announced that the Department of Energy made the decision to award the Lab's Managing and Operating contract to Brookhaven Science Associates for another 5 years with possible extensions for 15 more years. He thanked everyone for their support and said he will present to the CAC next month on the Lab's 10-year strategic plan.

Member Doroski said he has just had his book "The Inverted Mask" published and it is available on Amazon.com for anyone interested in purchasing it. He said it is a science fiction story that revolves around a missing top physicist.

Rich Murdocco, a former LI Pine Barrens Society Alternate said he is now working for the Teachers Federal Credit Union (TFCU). He would like to participate on the CAC as their representative and on behalf of the business community, and is happy to engage on topics of discussion.

Hodgin said Murdocco will be attending meetings as he prepares to apply for membership on the CAC.

## Approval of Minutes

Quorum was not met, so the October notes were not approved.

# 4. Membership Vote

No vote was taken as a quorum was not present (Local road closures because of an accident forced several members to miss the meeting.).

## 5. Environmental Updates – Jason Remien, Interim Manager, Environmental Protection Division

Jason Remien provided updates on the Sewage Treatment Plant (STP) upgrades, the Former Hazardous Waste Management Facility (FHWMF) Perimeter Soils Remediation – Phase 3, and the planned supplemental sediment sampling in the Peconic River.

Remien said the STP started discharging to groundwater recharge beds during the first week of October 2014 and the first set of SPDES effluent samples were collected on October 6<sup>th</sup> and 8<sup>th</sup>. Effluent mercury concentrations on both days were less than 10 ng/l. The current permit limit is 200 ng/l.

Member Schwartz asked why the decision was made to discharge to groundwater rather than the river.

Remien explained that new limits proposed for river discharge, particularly mercury, were really low and there was no way to get down to those limits as the Lab had already reduced the levels of mercury in onsite operations as much as possible. The requirements for metals are less stringent for discharge to groundwater, however, we agreed to maintain the existing surface water discharge limit for mercury in the revised SPDES permit (i.e. 200 ng/L). Also, with this new filtration system, we will no longer use the sand filter beds and that makes a huge difference.

Member Garber asked how much water is left in the Peconic River now that the switch has been made.

Remien said it is basically dry this time of year.

Member Blumer asked what area the samples are taken from.

Remien said just before it is discharged. However, the limits are met prior to final filtration.

Member Ziems asked what the original source of the mercury was.

Remien said the mercury is a legacy issue from many years ago, it was found in the Chemistry building sanitary lines, sinks, and drains.

On the FHWMF perimeter soils update, Remien said about 100 cubic yards of soil was removed from the area in July and August as the final phase of the soil cleanup there. All the sampling results were well below cleanup goals.

Remien said the 2014 sediment sampling in the Peconic River had resulted in one elevated mercury reading of 7.4 mg/kg. A decision was made to collect additional samples to confirm that this is a localized spot and not a more widespread area of contamination. A plan was sent to regulators for review, which includes a goal of delineating an area where the average mercury concentration is below 2.0 mg/kg.

Member Schuhmann asked why mercury is deposited in localized areas.

Remien said there are low lying areas and mercury is depositional, so it's hard to tell.

Hodgin said it is not uncommon to have hot spots.

# 6. Annual Groundwater Update – Bill Dorsch, Groundwater Protection Group

Dorsch reported that there are currently 10 operating groundwater treatment systems, five systems in shut-down mode, and three systems that have been decommissioned. From 1997 to 2013, a total of 22 billion gallons of contaminated groundwater has been treated and recharged to the aquifer, 7,133 pounds of VOCs have been removed, and 29 mCi of Sr-90 have been removed. He explained the status of the treatment systems and the progress of the VOC remediation. He gave details on the shutdown of the North Street East system, the Deep VOC characterization and new extraction wells, and the Bldg. 452 Freon-11 treatment system.

Dorsch also gave an update on the remediation progress of the radiological plumes and the surveillance and maintenance of the former reactors.

Member Schwartz asked how deep the extraction wells go and what is done with them when they are no longer needed.

Dorsch said they are about 170 to 180 feet below ground level. The further from the source, the deeper the plume is. When they are no longer in use, we abandon them.

Member Feinman asked how deep the wells are that are near the airport.

Dorsch said 200 to 280 feet.

Member Rehbein asked if just the contaminants are pumped up or is the water pumped up with them.

Dorsch said the water with the contaminants is pumped and then we either treat it or strip it of contamination.

Dorsch described a new extraction well that has been in operation since March 2013 and reported that about 90 pounds of Freon have been removed. The maximum Freon concentration in the source area is currently less than 50 ug/L. The system will be evaluated for shut down in 2015.

Member Schwartz asked if the Freon-11 is being released into the air.

Dorsch said yes, in permissible levels.

Member Pratka asked what Building 452 was used for.

Doug Paquette said it was a site maintenance facility. Freon was stored there.

Member Schwartz asked how Tritium is treated.

Dorsch said Tritium isn't treated, it is monitored and if necessary, pumped to a recharge basin located near the center of the site. There is no treatment for Tritium. In the late 90's, we did remove 100,000 gallons of water with the highest concentrations of Tritium and sent it to an offsite facility. The remainder will attain drinking water standards through a combination of natural attenuation and dilution.

Dorsch reported on recent inspections of the HFBR and BGRR. The HFBR security system has been upgraded, and roof repairs have been done on the BGRR and the office windows on the second and third floors are scheduled to be replaced.

Member Schwartz asked if the BGRR is still in use.

Dorsch said no, it is empty.

# 7. December Agenda Setting

Nora Sundin said that in December there will be a presentation on e-RHIC by Berndt Mueller and a presentation given by Doon Gibbs on the Lab's 10-year strategic plan. We will also have a holiday celebration.

## 8. Community Comment

Michael Giacomaro, East Yaphank Chamber of Commerce and East Yaphank Civic Association, said he has been involved with the CAC since 1998 and would like to commend the Lab on the fine work they have done cleaning up the contamination.

Mark Israel, BNL, said he wanted to relay a message from Member Peskin that he could not get to tonight's meeting because the road was closed due to an accident.

Member Schwartz said as a member of the CAC, he finds the remarks to be a pat on the back to the whole process.

Member Sprintzen said the Lab treats us with respect and establishes a level of trust. The Lab's commitment to the CAC is shown by their attendance each month.

Hodgin apologized to Member Garber and said next month we will tend to the things we could not do tonight due to lack of quorum. Everyone please be aware that William Floyd Parkway northbound is closed due to a serious accident.

The meeting adjourned at 8:04 PM.

# 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 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 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 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

#### <u>TOURS</u>

ISB - 3 (6/12/2014)

P = Present 2014 Affiliation		First Name	Last Name	Jan	Feb Nomtg	Mar	Apr	Мау	June	July <mark>No mtg</mark>	Aug <mark>No mtg</mark>	Sep	Oct	Nov	Dec
ABCO (Garber - 04/02)(Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan						Р			Р	Р	Р	
(Madigan -10/10)	Alternate	Michael	Madigan				Р	Р							
American Physical Society	Member	Margaret	Malloy	Р		Р	Р	Р	Р			Р	Р		
(Schuhmann 1/14)	Alternate	Reinhart	Schuhmann											Р	
Brookhaven Retired Employees Association (Peskin - 09/09)	Member	Arnie	Peskin					Р	Р			Р	Р		
(Franz - 12/09)	Alternate	Eena-Mai	Franz	Р		Р	Р	Р	Р				Р		
(Shapiro-1/13)	Alternate	Steve	Shapiro												
Citizens Campaign for the Environment	Member	Adrienne	Esposito	Р		Р									
	Alternate														
Colonial Woods Whispering Pines (Birben - 06/09)	Member	Christine	Birben												
(Rehbein -11/10)	Alternate	Eric	Rehbein	Р		Р		Р	Р					Р	
Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	Р		Р		Р	Р			Р	Р	Р	
(Meade – 06/12, Jim M 10/12)	Alternate	Jim	Meade				Р								
East Yaphank Civic Association	Member	Michael	Giacomaro	Р		Р	Р	Р	Р				Р	Р	
(Feinman - 02/09)	Alternate	Bob	Feinman			Р		Р	Р			Р		Р	
Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt												
Foundation for Economic Education (5/14)(Martin – 10/14)	Member	Bruce	Martin			Р	Р	Р	Р			Р	Р	Р	
(Edwards – 10/14)	Alternate	Estelle	Edwards												
(Pratka – 10/14)	Alternate	Craig	Pratka											Р	
Friends of Brookhaven (Kaplan - 07/01)	Member	Ed	Kaplan										Р		
(Schwartz - 11/02)	Alternate	Steve	Schwartz				Р	Р	Р			Р		Р	
Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	Р		Р	Р	Р	Р			Р	Р		
	Alternate	Scott	Carlin												
IBEW/Local 2230 (Krsnak 01/07)	Member	Scott	Krsnak												
	Alternate														
Individual (changed 3/12)	Member	Karen	Blumer	Р				Р						Р	
(added 6/12)	Alternate	Michael	Madigan	Р		Р						Р		Р	
Individual – (changed 3/12)	Member	Jane	Corrarino			Р		Р				Р			
	Alternate														
Individual – (changed 3/12)	Member	Iqbal	Chaudhry	Р			Р	Р	Р			Р	Р		
	Alternate														

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				Jan	Feb No mtg	Mar	Apr	May	June	July <mark>No mtg</mark>	Aug <mark>No mtg</mark>	Sep	Oct	Nov	Dec
P = Present 2014 Affiliation		First Name	Last Name	_											
L.I. Pine Barrens Society	Member	Richard	Amper			Р									
(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)	Alternate	Katie Rose	Leonard	Р					Р			Р	Р		
L.I. Progressive Coalition	Member	David	Sprintzen	Р		Р	Р	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			Р	Р		
Longwood Central School Dist. (Castro -06/09)	Member	Maria	Castro				Р					Р	Р	Р	
(Gerstenlauer removed & Sterne added 5/14)	Alternate	Phylllis	Sterne												
Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano	Р		Р		Р					Р		
	Alternate	Clara	McManus												
	Alternate	Joe	Мау												
Middle Island Civic Association	Member	Tom	Talbot	Р		Р	Р	Р	Р			Р		Р	
	Alternate	Kevin	Crowley												
Photon Sciences User Committee	Member	Jean	Jordan-Sweet	Р			Р		Р			Р		Р	
(Ravel -02/11)	Alternate	Bruce	Ravel	Р		Р						Р	Р		
Ridge Civic Association	Member	Pat	Henagan	Р		Р	Р	Р	Р			Р	Р		
	Alternate														
Town of Brookhaven (Graves - 06/06)	Member	Anthony	Graves												
	Alternate														
Town of Brookhaven, Senior Citizens Office	Member	James	Heil	Р		Р	Р	Р				Р			
	Alternate														
Town of Riverhead (Doroski - 04/11)	Member	Isidore	Doroski	Р		Р		Р	Р			Р	Ρ	Р	
(Hulme - 04/11)(Hulme removed 4/14)	Alternate														
Wading River Civic Association	Member	Helga	Guthy	Р		Р	Р		Р				Р		
	Alternate	Sid	Bail												