

**Community Advisory Council  
October 10, 2019  
Action Items/Notes**

*Final*

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. Cryo-Electron Microscopy project at BNL
5. Laboratory and Environmental Updates
6. Groundwater Update
7. Agenda Setting
8. Community Comment

### **1. Attendance**

Members/Alternates Present: See Attached Sheets.

Others Present: J. Anderson, J. Carter, M. Dikeakos, B. Dorsch, P. Genzer, D. Gillespie, J. Grenzen, S. Hartzell, R. Hodgins, R. Howe, A. Juchatz, D. Manning, R. McKay, A. Ozelis, D. Paquette, V. Racaniello, A. Rapiejko, M. Serrano, N. Sundin, J. Wanless

### **2. Correspondence and Handouts**

Items numbered one and two were e-mailed to Members on October 3, 2019. Items numbered three through six were available as handouts at the meeting.

1. Draft agenda for October 10, 2019 meeting
2. Draft notes from the September 12, 2019 meeting
3. Response to request from last meeting regarding new PFSA-free firefighting foam
4. Response to request for information regarding Carbon-14 in the Stack
5. Copy of presentation: The Cryo-Electron Microscopy project at BNL, an update
6. Copy of presentation: Groundwater Update

### **3. Administrative Items**

The meeting was called to order at 6:32 p.m. Reed Hodgins, facilitator, welcomed everyone to the meeting. He reviewed the ground rules and draft agenda and those present introduced themselves.

There were several edits to the September notes. They were approved as amended with none opposed and two abstentions.

Jack Anderson told the CAC that Lab Director, Doon Gibbs, was unable to be at tonight's meeting because he is attending a meeting in Ohio. He said, earlier this week the Electron Ion Collider proposals were presented to a DOE panel by Brookhaven and Jefferson Labs. We don't know when a decision will be made.

Member Shapiro asked if the DOE has decided this is the next highest priority.

Anderson said, the Nuclear Science Advisory committee has determined that this is the next highest priority. I believe the DOE is committed to it and that is why they are taking these steps.

#### **4. Cryo-Electron Microscopy project at BNL an update, Sean McSweeney – Photon Sciences Division**

Sean McSweeney explained that structural biology is the way to understand the role of biological molecules with an atomistic and a cellular view. Cryo-Electron Microscopy is a technique complementary to those we have developed at the light source. He said Cryo-EM is just one element of a larger goal of establishing a biological imaging center.

Member Ziems asked if the microscope was built in the Netherlands.

McSweeney said yes, it was built by an American company in the Netherlands.

Member Shapiro asked how long an experiment takes to run and how many can be run at the same time.

McSweeney said the request to conduct an experiment first goes through a screening process, which can take from several months to years. A typical measurement can take 2-3 days. We expect to do about 3 experiments per week.

Hodgin asked if the CAC would be interested in another more in-depth presentation. The group indicated yes.

#### **5. Laboratory and Environmental Updates**

Hodgin said last month the CAC asked if Carbon-14 was present in the Stack. Dennis Ryan, Interim Manager of the Radiological Control Division programs is here with more information for you.

Ryan said the Stack has been sampled about six times in prior years. There probably are some minor amounts of Carbon-14 that represent less than 1% of the total activity in the Stack.

Member Doroski asked about the potential for dust carrying high amounts of radioactive materials, including transuranics, as the Stack comes down.

Ryan said all of this is considered during the work planning phase. There are various ways to contain the dust. We will be sampling as well.

#### **6. Groundwater Update, Bill Dorsch – Groundwater Protection Division**

Bill Dorsch gave the CAC an update on the status of the groundwater plumes and remediation systems. He said no new impacts were detected during 2018 from active research and support activities. Once we reach our capture goal on the treatment systems, we petition the regulators to shut those systems down. Once approved, we put them in standby mode and sample them on a quarterly basis. This goes on for a few years and if we don't see any rebound, we go on to the next phase and petition for closure. He said the groundwater cleanup program continues to show significant groundwater quality improvements. Cleanup is continually optimized based on analysis and review of data. He then gave an update on the two emerging contaminants, PFAS and 1,4 dioxane. He said once drinking water standards have been established, any required remedial responses will be conducted under the established CERCLA process. BNL will

continue to work in close coordination with regulatory agencies on these emerging contaminants of concern.

Member Martin asked what Building 96, where the VOC plume/treatment system is located, was used for.

Dorsch said there were storage yards south of the building where vehicles were stored and car parts were cleaned. We think that is the source dating back to the 1960s.

Member Krupski asked at what depth you are finding contamination and how deep is groundwater.

Dorsch said there are two zones of contamination, one is about 130-160' below ground surface, and one is at 180-200'. Groundwater is at about 40' below ground surface.

Member Sicignano asked how you know when to turn the wells on and off. Do you monitor them while they are off?

Dorsch said yes, we monitor and watch to see if the numbers rebound. If the contaminant concentrations rebound, we turn the wells back on until concentrations drop below the capture goal in the extraction and/or monitoring wells.

Member Krupski asked who the regulators are.

Dorsch said members of the USEPA, and NYSDEC, but we also include the Suffolk County Department of Health in the decision-making process.

Member Jordan Sweet asked about the Ethylene Dibromide (EDB) treatment systems. She asked if it is an insecticide and how you know it came from BNL.

Dorsch said it is a fumigant. When we backtrack the EDB concentrations from the depth at which they are found, they track back to the center portion of the site. During the remedial investigation we identified that there was EDB stored in drums in that area. We installed some temporary wells downgradient at that time but did not detect EDB.

Member Shapiro asked if most of these are legacy issues. Do you know the origin?

Dorsch said any BNL groundwater contamination offsite is a legacy issue, based on the travel time to get there. We know the origin of this contamination and have treated it at the source area.

Member Doroski said he would like to introduce an article from the NY Times with background information on the BGRR. He would like to make it available to CAC members. He said he will email it.

Member Shapiro asked if tritium is still a problem at the HFBR.

Dorsch said we are continuing to monitor downgradient of the building, and there is no longer a plume we can define above the drinking water standard (DWS) of 20,000 pCi/L. There are occasional detections in the wells immediately south of the HFBR above the DWS resulting from water table elevation increases. We have petitioned to close the HFBR treatment system.

## **7. Agenda Setting**

Member Doroski said he has authored his second science fiction book and it is available on Amazon in paperback and e-book. The name of the book is Night Waves.

David Manning said the November agenda includes a presentation by Tim Green on Natural and Cultural Resources, and, if time permits, we may include a science presentation. If you have any requests, please send them to David. We will also continue to keep you updated on the EIC.

## **8. Community Comment**

Dan Gillespie, an organizer with Local 100, which he said represents nine workers who were employed by the previous food contractor at the Lab, said they are out at the front entrance to the Lab every morning asking for a boycott of the Lab's cafeteria. He said all nine workers submitted job applications to the new food service provider but were not given an interview. He stated that they appreciate any help.

Member Shapiro asked how the new food service provider got the job.

Manning said that BSA is not a party to the contract.

Anderson said the workers referenced are not BNL employees. It's a labor issue with a subcontractor and their employees. Neither BNL nor BSA can intervene.

Member Shapiro asked who awarded the contract to the new provider.

Anderson said that is an agreement between the DOE and NYS.

Member Jordan Sweet said, maybe BNL could provide resources and training to the people and help them find contacts and jobs nearby.

Hodgin said if CAC members would like to, they can discuss further after the meeting.

The meeting adjourned at 8:24 PM

Next meeting: November 14, 2019

				Jan	Feb	Mar No mtg.	Apr	May	June	July No mtg.	Aug No mtg.	Sep	Oct	Nov	Dec
<b>P = Present</b>	<b>2019</b>	<b>Affiliation</b>	<b>First Name</b>	<b>Last Name</b>											
		<b>ABCO – Civic</b> (Garber - 04/02) (Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan	P	P		P	P			P	P	
		(Madigan -10/10)	Alternate	Michael	Madigan										
		<b>American Physical Society – Business &amp; Labor</b>	Member	Reinhart	Schuhmann		P		P	P		P			
		(Schuhmann 1/14, member 9/15)	Alternate	Donavan	Hall	P									
		<b>Brookhaven Coalition of Chambers of Commerce – Bus &amp; Labor</b> (added 6/15)	Member	Ron	Trotta	P		P		P				P	
		<b>Brookhaven Retired Employees Association- BNL</b> (Peskin - 09/09)(Franz 1/17)	Member	Mark	Israel	P	P		P						
		(Franz - 12/09)(Israel 1/17)	Alternate	Eena-Mai	Franz	P		P	P			P			
		(Shapiro-1/13)	Alternate	Steve	Shapiro								P		
		<b>Citizens Campaign for the Environment – Advocacy &amp; Environment</b>	Member	Adrienne	Esposito	P	P		P	P			P		
		(Somma 11/16)	Alternate												
		<b>Colonial Woods Whispering Pines – Civic</b> (Birben - 06/09) (O’Neal 01/15, removed 10/15)	Member												
		(Rehbein -11/10)	Alternate	Eric	Rehbein										
		<b>Coram Civic Association</b> (Ziems - 06/12)	Member	Paul	Ziems	P	P		P	P		P	P		
		(Meade – 06/12, Jim M 10/12, Turk 1/16)	Alternate	Rosa	Turk	P	P		P	P		P			
		<b>East Yaphank Civic Association</b> (Feinman 06/19)	Member	Robert	Feinman		P		P						
		(Feinman - 02/09 – 11/15)(Mack 11/15)	Alternate	Catherine	Mack				P	P				P	
		(Feinman 05/19)(Giacomaro 06/19)	Alternate	Michael	Giacomaro										
		<b>Emeritus</b> (changed 3/8/12)	Member	Jean	Mannhaupt										
		<b>Foundation for Economic Education – Ed, Sci, &amp; Tech</b> (5/14)(Martin – 10/14)	Member	Bruce	Martin				P			P	P		
		(Pratka – 10/14)	Alternate	Craig	Pratka	P	P		P						
		<b>Friends of Brookhaven- BNL</b> (Kaplan 07/01–11/15)(Bowerman 11/15)	Member	Biays	Bowerman	P	P			P		P	P		
		(Schwartz - 11/02) (Ocko added 11/15)	Alternate	Steve	Schwartz				P						
			Alternate2	Ben	Ocko										
		<b>Huntington Breast Cancer Coalition – Health-Based Rep</b>	Member	Mary Joan	Shea										
			Alternate	Scott	Carlin										
		<b>Individual</b>	Member	Jane	Corrarino	P									
		<b>Individual</b>	Member	Karen	Blumer					P					
		<b>Individual</b>	Alternate	Michael	Madigan		P		P			P			
		<b>L.I. Pine Barrens Society – Advoc &amp; Env</b>	Member	Richard	Amper										
		(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)(Muether added – 5/15) (Wolf added-1/19)	Alternate	Ryan	Wolf	P	P		P	P					

				Jan	Feb	Mar No mtg.	Apr	May	June	July No mtg.	Aug No mtg.	Sep	Oct	Nov	Dec
P = Present	2019	Affiliation	Member	First Name	Last Name										
		<b>L.I. Progressive Coalition – Advoc &amp; Env</b>	Member	David	Sprintzen	P	P		P			P	P		
			Alternate												
		<b>Lake Panamoka Civic Association</b> (Biss - 04/02)(Staddon 10/17)	Member	Richard	Staddon	P	P		P				P		
		(Grandal - 10/10)	Alternate	Bonita	Grandal										
		<b>Longwood Central School Dist. – Ed, Sci, &amp; Tech</b> (Castro -06/09)(Adams 9/15)	Member	Tracy	Adams										
		(Gerstenlauer removed & Sterne added 5/14 removed 9/15)(Infranco1/17)	Alternate	Paul	Infranco										
		<b>Mastic Park Civic Association</b> (Sicignano – 6/12)	Member	John	Sicignano	P			P	P			P		
			Alternate	Clara	McManus				P						
			Alternate	Joe	May										
		<b>Middle Island Civic Association</b> (Filler 2/17)	Member	Martin	Filler	P	P		P	P		P			
		(Nowak 01/15 – 5/15)(Malloy 9/15)	Alternate	Margaret	Malloy										
		<b>NSLS-II User Committee – BNL</b>	Member	Jean	Jordan-Sweet	P	P		P	P		P	P		
		(Ravel -02/11-9/15)(Bohon added 11/15)	Alternate												
		<b>Ridge Civic Association</b> (Henagan removed 9/15)(Chattaway added 10/15)	Member	Wesley	Chattaway	P			P	P		P	P		
		<b>Suffolk County Legislature 1<sup>st</sup> Dist. - Government</b> (added 6/15)	Member	Al	Krupski				P	P		P	P		
			Alternate	John	Stype		P								
		<b>Teachers Federal Credit Union – Bus &amp; Labor</b> (Murdocco 3/15) (Stafford 1/18)	Member	Christine	Stafford	P				P		P	P		
			Alternate												
		<del><b>Town of Brookhaven</b> (Graves – 06/06) (removed 1/2015)</del>	Member												
			Alternate												
		<b>Town of Brookhaven, Senior Citizens Office - Government</b>	Member	James	Heil	P				P					
			Alternate												
		<b>Town of Riverhead - Government</b> (Doroski - 04/11)	Member	Isidore	Doroski		P		P			P	P		
		(Hulme - 04/11 - 4/14)(Janis Rottkamp 04/16)	Alternate	Janis	Rottkamp										
		<b>Wading River Civic Association (Rundlett 09/16)(Kneitel 02/17)(Perez 06/19)</b>	Member	Henry	Perez					P		P			
		(Bail and Guthy removed 11/2016)	Alternate	Linda	Rundlett				P	P	P				