

**Community Advisory Council**  
**March 11, 2021**  
**Action Items/Notes**

*Final*

*Note: This meeting was held virtually. A video recording of the Zoom meeting is available.*

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. Environmental Updates
5. High Flux Beam Reactor (HFBR) Stack Demolition & Decommissioning update
6. Emerging contaminants of concern: Per- and Polyfluoroalkyl Substances (PFAS)/1,4 Dioxane update
7. Agenda Setting
8. Community Comment

### **1. Attendance**

Members/Alternates Present: See Attached Sheets.

Others Present: J. Anderson, J. Bukoski, G. Canellis, J. Carter, M. Creamer, B. Dorsch, A. Engel, N. Foster, P. Genzer, D. Gibbs, J. Granzen, T. Green, S. Hartzel, E. Hicks, R. Hodgins, B. Howe, D. Manning, B. McCaffrey, R. McKay, G. Olson, A. Ozelis, D. Paquette, D. Pocze, C. Polanish, V. Racaniello, A. Rapiejko, J. Remien, N. Sundin, R. Tribble, J. Wanless, T. Welty, K. White

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

Items numbered one and two were e-mailed to Members on March 3, 2021. Items numbered three through five were e-mailed to Members on March 11, 2021.

1. Draft agenda for March 11, 2021 meeting
2. Draft notes from the November 12, 2020 meeting
3. Copy of presentation: HFBR Stack Demo update
4. Copy of presentation: Additional photos of Stack Demo
5. Copy of presentation: Emerging contaminants of concern update

### **3. Administrative Items**

The meeting was called to order at 6:30 p.m. Reed Hodgins, facilitator, welcomed everyone to the Zoom virtual meeting. He reviewed the ground rules and draft agenda. He welcomed Jane Koropsak, new member representing Colonial Woods/Whispering Pines community.

Doon Gibbs, Laboratory Director, welcomed everyone.

Jack Anderson, Deputy Director for Operations, updated the CAC on COVID-19 at the Lab. He spoke about the number of cases in Nassau and Suffolk counties. He said most of the

Laboratory staff is still working remotely. Hopefully by the summer we will be able to have more staff onsite.

David Manning introduced Amy Engel, new Manager of Environmental and Community engagement. He then said there was a question raised last month about the sustainable technologies that will be employed at the new Science and User Support Center (SUSC) in Discovery Park (DP). He said all Department of Energy (DOE) buildings have to meet high performance sustainable principles with energy efficiency requirements. We will have someone from our Facilities and Operations directorate at a future meeting to talk about developments and our sustainability principles.

Hodgin said we are still working on recruitment of new CAC members so if anyone has any suggestions, please send them in.

#### Approval of notes:

The November notes were approved as written with none opposed and four abstentions.

#### **4. Environmental Updates**

Jason Remien, Environmental Protection Division manager, updated the CAC on the building 650 decommissioning and demolition. He said more than half the building should be down by early next week. The monitoring we have done so far has shown no issues. He said there will be a more detailed presentation next month.

Tim Green, Natural and Cultural Resources manager, updated the CAC on deer management. He said the first weekend of deer removal was in February. There were 38 deer removed. We plan to do another one this weekend and hope to remove over 100. We are working toward lowering the population to less than 250 deer onsite.

Member Pratka asked how the deer population onsite is estimated and said the goal has changed over the years. Will it change again?

Green said we conduct windshield surveys with multiple driving routes throughout the Lab to get the rough estimate. The goal has been to get below 250 but the ecological care capacity for the area is between 80 and 250 deer. The Department of Environmental Conservation (DEC) would like us to get to 160 or less.

Member McCormick asked how the deer are taken.

Green said the United States Department of Agriculture (USDA) has a contract with the DOE. They use high powered rifles.

#### **5. HFBR Stack Demolition & Decommissioning update**

Jason Remien, Matt Creamer, Megan Magrum, and Nate Foster presented to the CAC on the Demolition & Decommissioning (D&D) of the HFBR Stack.

Hodgin then showed a time lapse video of the demolition of the Stack.

#### **\*ACTION ITEM**

Send link to video of Stack demo to CAC members

Member Esposito asked about dust sampling. She asked how the numbers were assessed and if there were any problems with the instrumentation during the winter

Megan Magrum, Safety and Health Services Division, said sampling occurred over ~8-hrs (indicative of the 8-hr workday) and the samples collected were then sent out to a laboratory for analysis. The recommended minimum temperature for pump operation was 32 degrees, and no issues were detected during sample collection in response to low temperatures. Additionally, the Army Corp did not operate when it was below freezing, so that was not an issue.

Member McCormick said the air monitors appear to be at ground level, but the stack is several hundred feet high. How do you account for wind velocity and direction at the top in terms of monitoring at the bottom?

Nate Foster, Radiological Control Division, said prior to the start of this project, there was air modeling done which accounts for average atmospheric conditions. That model goes as far as not taking credit for any engineering controls, assuming the entire source term of the stack gets released at once, and then sent towards the boundary. The result of that model showed no impact to off-site public. The other factor is the particulate size. The contamination is integral to the concrete and concrete dust, which tends to settle out close to the activity.

Member McCormick said modeling doesn't take into account the actual wind velocity at any given time during the activity, so that may or may not have been accurate in terms of what was happening with wind velocity during the actual demolition. Did you have any off-site monitoring systems that would corroborate your data?

Foster said my program did not have any off-site air sampling.

Remien said the Lab has site boundary sampling stations, which confirmed the model. There also was monitoring done at height, which would have identified anything happening.

Matt Creamer, US Army Corp of Engineers, said there was dual monitoring done because both the Army Corp and the Lab had their own monitoring systems. There was also personal monitoring for the workers at height. We did not see any elevated reading on the workers that were working at height during the demolition.

Member McCormick asked if that data is available for the CAC to review.

Foster said all the particulate monitoring data is part of the annual site environmental review. I am happy to share that data.

Creamer said he will see if he can get data from the contractor as well.

Member McCormick said he is not comfortable with the modeling data. He would have preferred real data from the actual conditions.

Creamer said when it got too windy, the contractor could not work, because it would not be safe to have workers at height during high winds. Also, the air monitoring data was shared with the regulators on a weekly basis. New York State Department of Environmental Conservation (NYSDEC) and the Department of Health (DOH) reviewed it and had no issues or concerns. We will go through the proper channels to get that data to you.

Hodgin said we will make sure we compile the data and get it to the CAC.

**\*ACTION ITEM**

Send additional data on air monitoring to CAC

Manning said the DOE put out a press release and as a result there were two other stories written. One was the DOE press release; the Long Island Business News posted a story and the Army Corp of Engineers also posted a story. We will send the links to you.

**\*ACTION ITEM**

Send link to 3 articles to CAC Members

Member Schuhmann asked about the types of contaminants found inside the Stack as well as any isotopes that were present.

Foster said it was largely Strontium and Cesium. I believe there was also Carbon 14 and a small amount of Plutonium. I do not have the data set in front of me, but I can provide that after the meeting if you would like.

John Bukoski said the Stack was screened routinely for radiation. The only time we noticed a slightly elevated concentration was in a part of the concrete that was sealed with a spreadable material, so it would not migrate away. We didn't have any issues with that portion. As we worked our way down, we were cutting larger pieces from the outside in to avoid cutting on the interior of the stack, and all that material was being watered down at the same time. The pieces we were dropping were generally about 5 x 5-foot pieces. The only area that elevated concentrations were found was inside the 42-inch pipe at the base.

Member Schuhmann said that all sounds good but I was wondering if you had taken a piece and not watered it down but checked it to see the level of radioactivity.

Creamer said before any work was started, there was sampling done of the soil and the interior of the stack.

Member Bowerman said some friends told him there were ravens nesting on the Stack. He wondered if they were still there during demolition.

Remien said we were concerned about that but there were no birds on the Stack prior to the start of the project. Tim Green was keeping an eye on that.

Bukowski said there are falcons in the area, but not ravens that I am aware of. We saw them investigating the Stack but there was no nest or nest activity.

**6. Emerging contaminants of concern: PFAS/1,4 Dioxane update**

Doug Paquette, Environmental Protection Division, updated the CAC on emerging contaminants of concern in groundwater at BNL. He spoke about Per and Polyfluoroalkyl Substances (PFAS) and 1,4 Dioxane.

Member Esposito asked if the treated effluent at the Sewage Treatment Plant (STP) was tested for 1,4 Dioxane.

Paquette said yes and it was non-detect, and we will have to keep an eye on it.

Member Shapiro asked how the contamination at Brookhaven compares to what is happening at the Grumman facility.

Member Esposito said it is much more severe at Brookhaven.

Paquette said that based upon his understanding of the data from the Calverton facility, the concentrations are higher here at the two firehouse training areas.

Member Shapiro asked if any of the supply wells south of the Lab are contaminated.

Paquette said in the area south of the Lab, most of the homes have been connected to public water. A few of the homeowners refused the offer to be connected. DOE offers to sample those private wells. It is a cooperative program between DOE and Suffolk County Department of Health Services (SCDHS). We don't believe any of the contamination from the Lab is affecting those private wells, however there were several homes south of the airport that were impacted by PFAS contamination. About a year ago, the DEC did an investigation and identified high levels of PFAS in the shallow groundwater near the airport.

Member Esposito said she remembers five years ago; the DEC conducted a survey asking if anyone used this firefighting foam and BNL said none of it was ever used at the Lab. Today I am hearing that it was used here from 1996-2008. I realize you probably didn't know that then, but how do we know that the records you have now are complete. I am concerned that the levels are so high and so spread out.

Paquette said there was some miscommunication in the initial response to the survey that went out. We updated the questionnaire and sent a revision to NYS several years ago. We tried to do our best to look for all available records related to the use of firefighting foam, including having discussions with long term firefighters. They gave us some good insight into where training occurred. We also found photos that helped us identify areas where firefighting foam had been used for practice and where releases from fire suppression systems had occurred. We used this information to guide our 2018 groundwater investigation of eight foam release areas. In addition to finding impacts to groundwater from firefighter training, we confirmed that several areas were impacted by releases from fire suppression systems. After they systems were installed, it was common practice to test them by releasing foam to make sure they worked. In each of these cases, we found that the groundwater has been impacted. Unfortunately, some of those releases happened back in the 1970s and 1980s, therefore these releases have had a very long impact to groundwater quality. As part of the phase four investigation discussed tonight, we sampled a large number of monitoring wells and didn't find any new areas of concern.

Member Ziems asked if PFAS is used to put out grease fires. If so, did anyone check out the kitchen area?

Paquette said other types of fire suppressions systems were used at the cafeteria (systems that did not contain PFAS). PFAS was put into firefighting foam as a surfactant to spread out over a fire and smother it, mainly used for gasoline/petroleum fires.

Member Esposito asked if the Lab has a plan for 1,4-Dioxane remediation. She also asked if the Peconic River could potentially be impacted by either the 1,4-Dioxane or PFAS plumes.

Paquette said we do not yet have a plan for active 1,4-Dioxane remediation. However, we are having internal discussions and initial discussions with the regulators regarding this issue. The need to actively remediate 1,4-Dioxane will be fully evaluated during a future remedial investigation/feasibility study. At this point we are trying to understand where it is, what the concentrations are, and what potential impact it is having. We are not seeing 1,4-Dioxane in the Sewage Treatment Plant (STP) effluent. With regard to potential impacts to the Peconic River, the monitoring wells at the site boundary show the contamination is in the middle to deep portions of the upper glacial aquifer, so there aren't going to be groundwater to surface water discharges at this point. Since 2014 the STP effluent has been going into recharge basins. Prior to that water went through a series of filter beds and then was discharged to the Peconic River. We don't know if these contaminants could have entered the river prior to 2014. We don't have that data.

Remien said there was a question raised by Member Sprintzen about whether employees should bring their own water to work. The answer is no, our supply wells onsite are regulated by the Suffolk County Department of Health Services. None of our supply wells have shown 1,4-Dioxane above the drinking water standard. Some did detect PFAS, however we have either added granulated carbon filters to treat it or we are no longer using those wells.

Member Esposito said by law you had to notify employees, right?

Remien said yes.

## **7. Agenda Setting**

David Manning said Berkner Hall, room B, where we used to meet in person has undergone updating to their conferencing system and at some point, we will be using a hybrid model and projecting these meetings from Berkner B.

Manning said next month, Remien will be providing an update on the Bldg. 650 demolition project. There will be further discussion on the emerging contaminants of concern, and we hope to have time for a science presentation. Allison McComiskey leads the climate and environmental science area of the Lab and we hope to have her here for a presentation.

The following month, we will have an update on the Electron Ion Collider Environmental Assessment. We are open to any of your requests.

Member Sprintzen asked for follow-up to the question about the buildings in the Discover Park area and if they are environmentally friendly.

Manning said, yes, thank you, we have that on our list for follow-up.

## **8. Community Comment**

There was no community comment.

The meeting adjourned at 9:07 PM

Next meeting: April 8, 2021

<b>P = Present</b>	<b>2021</b>	<b>Affiliation</b>		<b>First Name</b>	<b>Last Name</b>	<b>Jan No mtg</b>	<b>Feb No mtg</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
		<b>ABCO – Civic</b> (Garber - 04/02) (Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan			X									
		(Madigan -10/10)	Alternate	Michael	Madigan												
		<b>American Physical Society – Business &amp; Labor</b>	Member	Reinhardt	Schuhmann			X									
		(Schuhmann 1/14, member 9/15)	Alternate	Donavan	Hall												
		<b>Brookhaven Coalition of Chambers of Commerce – Bus &amp; Labor</b> (added 6/15)	Member	Ron	Trotta												
		(Inserra added10/20)	Alternate	Carmine	Inserra			X									
		<b>Brookhaven Retired Employees Association- BNL</b> (Peskin - 09/09)(Franz 1/17)	Member	Mark	Israel			X									
		(Franz - 12/09)(Israel 1/17)	Alternate	Eena-Mai	Franz			X									
		(Shapiro-1/13)	Alternate	Steve	Shapiro			X									
		<b>Citizens Campaign for the Environment – Advocacy &amp; Environment</b>	Member	Adrienne	Esposito			X									
		(Somma 11/16)	Alternate														
		<b>Colonial Woods Whispering Pines – Civic</b> (Birben - 06/09) (O'Neal 01/15, removed 10/15)(Koropsak 3/21)	Member	Jane	Koropsak			X									
		(Rehbein -11/10)	Alternate														
		<b>Coram Civic Association</b> (Ziems - 06/12)	Member	Paul	Ziems			X									
		(Meade – 06/12, Jim M 10/12, Turk 1/16)	Alternate	Rosa	Turk			X									
		<b>East Yaphank Civic Association</b> (Feinman 06/19)	Member	Robert	Feinman												
		(Feinman - 02/09 – 11/15)(Mack 11/15)	Alternate	Catherine	Mack												
		<b>Emeritus –</b> (Sprintzen changed from Individual10-20)	Member	David	Sprintzen			X									
		<b>Foundation for Economic Education – Ed, Sci, &amp; Tech</b> (5/14)(Martin – 10/14)	Member	Bruce	Martin			X									
		(Pratka – 10/14)	Alternate	Craig	Pratka			X									
		<b>Friends of Brookhaven- BNL</b> (Kaplan 07/01–11/15)(Bowerman 11/15)	Member	Biays	Bowerman			X									
		(Schwartz - 11/02) (Ocko added 11/15)	Alternate	Steve	Schwartz			X									
			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			X									
		<b>Individual</b>	Member	Karen	Blumer												
		<b>Individual</b>	Alternate	Michael	Madigan												
		<b>Individual</b> (Sprintzen changed to Emeritus 10-20)	Member	David	Sprintzen			X									
		<b>L.I. Pine Barrens Society – Advoc &amp; Env</b>	Member	Richard	Amper												

				Jan No mtg	Feb No mtg	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
P = Present	2021	Affiliation	First Name	Last Name											
		(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)(Muether added – 5/15) (Wolf added-1/19)(Moran added 2/20)(Muether 10/20)	Alternate	Katie	Muether										
		(Gonzales added 11/20)	Alternate2	Miranda	Gonzales		X								
		<b>Lake Panamoka Civic Association</b> (Biss - 04/02)(Staddon 10/17)	Member	Richard	Staddon										
		(Grandal - 10/10)	Alternate	Bonita	Grandal										
		<b>Longwood Central School Dist.</b> – Ed, Sci, & Tech (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										
			Alternate	Clara	McManus										
			Alternate	Joe	May										
		<b>Middle Island Civic Association</b> (Filler 2/17)	Member	Martin	Filler		X								
		(Nowak 01/15 – 5/15)(Malloy 9/15)	Alternate	Margaret	Malloy										
		<b>NSLS-II User Committee</b> – BNL	Member	Jean	Jordan-Sweet		X								
		(Ravel -02/11-9/15)(Bohon added 11/15)(Bohon removed)	Alternate												
		<b>Ridge Civic Association</b> (Henagan removed 9/15)(Chattaway added 10/15)(Casanova added 11/19)	Member	Ken	Casanova		X								
		<b>Suffolk County Legislature 1<sup>st</sup> Dist.</b> - Government (added 6/15)	Member	Al	Krupski										
			Alternate	John	Stype		X								
		<b>Teachers Federal Credit Union</b> – Bus & Labor (Murdocco 3/15) (Stafford 1/18)	Member	Michelina	Cahill										
		(Cahill 5/20)	Alternate												
		<b>Town of Brookhaven, Senior Citizens Office</b> - Government	Member	James	Heil										
			Alternate												
		<b>Town of Riverhead</b> - Government (Doroski - 04/11)(McCormick – 10/20)	Member	Dan	McCormick		X								
		(Hulme - 04/11 - 4/14)(Janis Rottkamp 04/16)	Alternate	Janis	Rottkamp										
		<b>Wading River Civic Association</b> (Rundlett 09/16)(Kneitel 02/17)(Perez 06/19)	Member	Henry	Perez		X								
		(Bail and Guthy removed 11/2016)	Alternate	Linda	Rundlett										