Community Advisory Council November 9, 2023 Action Items/Notes

Note: This was a hybrid meeting, held virtually through Zoom and in-person in Berkner Hall, room B.

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. Operations Highlights for the Lab
- 5. Update on the Medical Isotope Program at BNL
- 6. Transitioning the Isotope Program to a Nuclear Regulatory Structure
- 7. Environmental Assessment: Clinical Alpha Radionuclide Producer
- 8. Agenda Setting
- 9. Community Comment

1. Attendance

Members/Alternates Present: See Attached Sheets.

<u>Others Present</u>: P. Caradonna, R. Carter, C. Cutler, A. Emrick, A. Engel, S. Gonzalez, K. Green, T. Green, S. Gonzalez, J. Hewett, J. Higbie, R. Hodgin, R. Howe, D. Manning, R. McKay, C. Ojeka, G. Olson, C. Polanish, J. Remien, J. Wanless

2. Correspondence and Handouts

Items numbered one and two were e-mailed to Members on November 2, 2023. Items numbered three through six were e-mailed to Members on November 9, 2023.

- 1. Draft agenda November 2023 meeting
- 2. Draft notes from the October 2023 meeting
- 3. Copy of presentation: Operations Highlights for the Lab
- 4. Copy of presentation: Update on the Medical Isotope Program at BNL
- 5. Copy of presentation: Transitioning the Isotope Program to a Nuclear Regulatory Structure
- 6. Copy of presentation: Environmental Assessment: Clinical Alpha Radionuclide Producer

3. Administrative Items

The meeting was called to order at 6:32 p.m.

Reed Hodgin, CAC Facilitator, welcomed everyone to the November CAC meeting. He went over the ground rules and draft agenda.

David Manning, Director – Stakeholder Relations Office, introduced the Lab's newly appointed Deputy Director for Operations, Ann Emrick.

Emrick introduced herself and welcomed the CAC.

JoAnne Hewett, BNL Director, welcomed everyone to the meeting.

All those present, both in-person and virtually introduced themselves.

Sal Gonzalez, Office of Educational Programs, displayed to the in-person audience a list of all those participating virtually.

Approval of minutes:

The October 2023 CAC Action Items and Notes were approved as written with none opposed and two abstentions.

4. Operations Highlights for the Lab – Ann Emrick, Laboratory Deputy Director for Operations

Emrick spoke about her background. She said she has been at the Lab for 36 years and started her career as a researcher. She spoke about her journey at BNL and the path to her current role. She said she is dedicated to BNL, the community, and the environment. She said her campus strategy is to enable the science at the Lab.

Member Schuhmann asked for the status of the gym, basketball court and pool at the Lab.

Emrick said they are all open, including the volleyball court.

Member Israel asked for an update on the child development center and the cafeteria.

Emrick said the child development center is being outsourced, as it was before. She said the contract for cafeteria food will be going out to bid for a new vendor soon. Currently there are several food vendors that come on-site.

Member Jordan-Sweet asked about the status of the gas station and Brookhaven Center.

Emrick said there are discussions about the Center or some other sort of social gathering place.

Jason Remien, Environmental Protection Division, said the gas station will probably not be returning to the Lab site. There are a lot of liability issues associated with having a gas station onsite.

Hewett said none of the other national labs have a gas station anymore.

Member Sprintzen said he misses the Brookhaven Center. He asked if the new Science User Support Center (SUSC) building is Leadership in Energy and Environmental Design (LEED) certified.

Peggy Caradonna, Modernization Project Office, said the SUSC building is designed to conform with the Department of Energy (DOE) high performance standard, which equates to a LEED silver certification. The DOE has now moved back to LEED certifications so the Lab will strive for LEED gold in the future.

Hewett mentioned that the Lab is looking into putting solar panels on top of the parking garage next to the building.

5. Update on the Medical Isotope Program at BNL – Cathy Cutler, Chair, Isotope Research and Production Department

Cutler spoke about the DOE Isotope Program mission and the Tri-Lab effort (BNL, Los Alamos National Lab, and Oak Ridge National Lab) to increase production of the cancer fighting isotope Actinium 225 (Ac-225). She said the plan is to repurpose the former Hazard Category 3 (HC-3) facility, Bldg. 870 for hot-cell installation. She said Bldg. 870 is located next to waste management and has been sitting idle. It is an ideal facility to refurbish and make record batches of Ac-225. Some cancer patients that are not responding to traditional treatment are seeing successful results with Ac-225 and there is no commercial supplier. Cutler showed images of patients after treatment with Ac-225 highlighting how it works to combat cancers. She said the doses are normally given two weeks apart and results from trials have been phenomenal.

Cutler said the Lab received CD-0 for this project in December and is currently working on preconceptual designs.

Member Israel asked if at the point in time that the Electron Ion Collider (EIC) is operational, and the Relativistic Heavy Ion Collider (RHIC) is shut down, how will that impact the Linear Accelerator (LINAC) or the Brookhaven Linac Isotope Producer (BLIP).

Cutler said the accelerator can be run for isotope production separately without RHIC.

Member Schuhmann asked what is involved in refurbishing a hot cell and if they are very contaminated.

Cutler said to refurbish a hot cell, everything is cleaned out and the electronics are replaced. The contamination is removed, and sealant is put over it. The windows are removed and shipped back to the company to be cleaned.

Member Freeman asked what the side effects of Ac-225 are, is there any cell degradation, and what is the cost feasibility.

Cutler said she does not know the actual cost of treatment, but it is much more cost effective compared to the cost of chemotherapy, and fewer treatments are needed. Isotopes use a targeted approach, so they are not destructive to the patient's cells and there are no toxic side effects.

Member Madigan asked for an estimate of how long it will take to replace the current treatments with this technology.

Cutler said it normally takes about 20 years for a radiopharmaceutical to get approved. This is moving quickly, but it will still be about 10 years.

6. Transitioning the Isotope Program to a Nuclear Regulatory Structure - Robert Carter, Nuclear Transition Project Manager

Carter explained that transitioning the Lab's Isotope program to a Nuclear regulatory structure will result in no change to operations. There will be a change to the regulatory code only, but no change to the actual work. He spoke about nuclear safety regulations and said the full transition is expected to take two years.

Carter then explained that Hazard Categorization is based on potential consequence and said that analysis confirmed that the Radionuclide Research & Production Laboratory (RRPL) contains HC-3 (only local significant consequences) quantities of material. He explained that

the Clinical Alpha Radionuclide Producer (CARP) facility adds capacity but introduces no new risks and will not need to undergo a transition to nuclear status.

7. Environmental Assessment: Clinical Alpha Radionuclide Producer - Jennifer Higbie, Environmental Protection Division

Higbie spoke about the National Environmental Policy Act (NEPA) process and the Environmental Assessment (EA) for the Clinical Alpha Radionuclide Producer (CARP). She spoke about the three alternatives and said the draft EA will be completed in early December and will be distributed for internal comments. The draft final EA will then be distributed to NY State. The DOE prepares the determination of either a finding of no significant impact (FONSI) or a need to prepare an Environmental Impact statement. There is a target date of January 2024 to publish the determination and final EA.

Member Jordan Sweet asked if the possibility for a natural disaster is addressed in the EA.

Higbie said yes that is one of the things that is accounted for.

Green said all the buildings on site are built with a consideration for earthquakes even though there aren't many in this area, buildings are built to withstand wind and storms.

Member Keenan asked if it is determined that an Environmental Impact statement is required, how long would that delay the project.

Higbie said it would extend it about two years.

Member Freeman asked if Hazard Category 3 containment units can be used for storage and transportation from one area to another.

Carter said yes, these containers can be used for short term storage.

Member Madigan asked if a determination has been made about using an old or new building.

Chris Ojeka said no decision has been made yet.

Tim Green said there will be the same effects whether the Lab builds new or reuses an existing building.

Hodgin said these topics are important to the CAC and we would appreciate it if the presenters would return with updates when available.

8. Community Comment

Amy Engel told the group that the Community Involvement office has a Speakers Bureau program and they go out to various groups in the community to talk about what's going on at the Lab. She said if anyone is interested in a presentation to let her know.

9. Agenda Setting

Amy Engel asked CAC Members to email her with their requests for future presentations. She said topics of discussion she currently has are climate solutions, the CFN, NSLSII, and battery storage.

Member Madigan asked for an update on nano glass and zero waste recycling.

Manning said there have been presentations on invisible glass in the past, but the Lab can certainly provide another update on that topic. The Lab has a robust recycling program and can also provide updates on that topic.

Member Kern asked for an update on battery storage. He asked if someone from the Lab could explain the need for it and the safety issues associated with it.

Manning said the Lab has a strong team that is working on battery storage led by Esther Takeuchi and can certainly provide a presentation on it from a science perspective.

Meeting adjourned at 8:41PM

Next meeting: March 14, 2024

X = Present 2023 Affiliation				Jan No mtg	Feb No mtg	Mar	Apr	Мау	June		Aug No mtg	Sep	Oct	Nov	Dec
		First Name Last	Last Name						No mtg	No mtg					
ABCO – Civic	Member	Ray	Keenan			х	х	х				Х	х	х	
	Alternate	Michael	Madigan			х		х							
Brookhaven Coalition of Chambers of Commerce – Business & Labor	Member	Ron	Trotta			х									
	Alternate	Carmine	Inserra				Х								
Brookhaven Retired Employees Association- BNL Affiliation	Member	Mark	Israel			х	Х	Х				Х	Х	Х	
	Alternate	Eena-Mai	Franz												
Brookhaven Village Association – Civic	Member	Reinhardt	Schuhmann				Х	Х				Х	Х	Х	
	Alternate	Chris	Ciervo												
Citizens Campaign for the Environment – Advocacy & Environment	Member	Adrienne	Esposito			х	Х	Х							
	Alternate	Maureen	Dolan-Murphy												
Colonial Woods Whispering Pines – Civic	Member	Jane	Koropsak			х	Х	Х				Х	Х	Х	
	Alternate														
Cornell Cooperative Extension – Health based	Member	Chris	Pickerell					Х				Х			
	Alternate	Lorne	Brousseau										Х		
Diversity, Equity, and Inclusion – BNL Affiliation	Member	Noel	Blackburn				Х								
	Alternate	Menzel	Smith-Jones												
East Yaphank Civic Association - Civic	Member	Robert	Feinman			Х	Х	Х				Х	Х		
	Alternate	Laura	Reid												
Emeritus	Member	David	Sprintzen				Х	Х				Х	Х	Х	
FOREST - Advocacy & Environment	Member	John	Pavacic			Х	Х	Х				Х		Х	
	Alternate														
Foundation for Economic Education – Education, Science & Technology	Member	Bruce	Martin				Х	Х							
	Alternate	Craig	Pratka			Х	Х								
Gordon Heights Civic Assoc Civic	Member					Х	Х	Х							
	Alternate														
Individual	Member	James	Freeman									Х		Х	
Individual	Member	Jane	Corrarino			х	Х					Х		Х	
Individual	Member	Karen	Blumer			х		Х				Х			
	Alternate	Michael	Madigan										Х	х	
L.I. Pine Barrens Society – Advocacy & Environment	Member	Richard	Amper												
	Alternate	Andrew	Wong			х	х	х				Х	Х	х	
Longwood Central School Dist. – Education, Science & Technology	Member	Tracy	Adams												

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X = Present 2023 Affiliation		First Name	Last Name	Jan No mtg	Feb No mtg	Mar	Apr	Мау	June No mtg	July No mtg	Aug No mtg	Sep	Oct	Nov	Dec
	Alternate	Paul	Infranco												
Middle Island Civic Association – Civic	Member	Martin	Filler			х	х	х					х	х	
	Alternate	Margaret	Malloy												
National Grid – Business & Labor	Member	Brian	Sapp					х				Х	Х	Х	
	Alternate														
New York League of Conservation Voters – Advocacy & Environment	Member	Casey	Petrashek					х					Х	Х	
	Alternate														
NSLS-II User Committee – BNL Affiliation	Member	Jean	Jordan-Sweet			х	х						Х	Х	
	Alternate	Matthew	Whitaker			х	х	х					х	х	
Ridge Civic Association – Civic	Member	Scott	Wood					х				х	х	х	
	Alternate	Ken	Casanova												
Stony Brook Hospital – Health based	Member	Erika	Karp					х				х	Х	Х	
	Alternate														
Suffolk County Legislature 1 st Dist. – Government	Member	AI	Krupski			х		х							
	Alternate	Gwynn	Schroeder			х									
Teachers Federal Credit Union – Business & Labor	Member	Jashmin	Futch			х	х	х					х	х	
	Alternate	Sandra	Young												
Town of Brookhaven – Government	Member	Dan	Panico			х									
	Alternate	Patricia	Kaloski			х									
Town of Riverhead - Government	Member	Bob	Kern			х	х						х	х	
	Alternate	Frank	Mancini					х							
Wading River Civic Association - Civic	Member	Henry	Perez			х	х	х							
	Alternate	Linda	Rundlett										х		