

**Community Advisory Council  
September 11, 2025  
Action Items/Notes**

# Final

*Note: This was a hybrid meeting, held virtually through Zoom and in-person in Bldg. 101, SUSC. 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. EIC Tunnel Cooling water design
6. CAC Member-only discussion on letter written by the subcommittee
7. World's First Technological Advancements from the EIC
8. Community Comment
9. Agenda Setting

## **1. Attendance**

Members/Alternates Present: See attendance sheet at the end of the notes

Others Present: E. Aschenauer, B. Barth, X. Chen, B. Christie, A. Engel, G. Cannellis, C. Folz, P. Genzer, S. Gonzalez, K. Green, A. Juchatz, D. Manning, R. McKay, J. Michaels, R. Minzloff, A. Morocho, C. Ojeka, A. Ozelis, D. Paquette, C. Polanish, V. Racaniello, A. Rapiejko, J. Remien, C. Schaefer, L. Smith, M. Sweet, J. Wanless, K. White

## **2. Correspondence and Handouts**

Items numbered one and two were e-mailed to Members on September 4, 2025. Items numbered three through five were e-mailed to Members on September 11, 2025.

1. Draft agenda for the September 2025 meeting
2. Draft notes from the May 2025 meeting
3. Copy of presentation: Environmental update and EIC Tunnel components
4. Copy of presentation: The EIC – a collider to unravel the mysteries of visible matter
5. Letter from CAC for review and discussion

## **3. Administrative Items**

The meeting was called to order at 6:30 p.m.

David Manning, Director - Stakeholder Relations office, welcomed everyone to the meeting after providing a tour of the building and dinner in the lobby of the SUSC building 101. He explained there are some sound issues with the room and asked everyone to let him know if they are having difficulty hearing.

Amy Engel, Manager - Community Engagement office, said the last Open House at the Laboratory highlighting the CFN will be held on September 14<sup>th</sup>. She also said there will be a town hall hosted by the Lab on September 19. She encouraged everyone to attend.

Ken White, Facilitator, welcomed everyone and went over the ground rules. He asked everyone present in the room to introduce themselves.

Amy Engel then asked the online audience to introduce themselves and said quorum has been established.

Member Pratka said his attendance was not recorded at the May meeting.

The May 2025 CAC Action Items and Notes were approved as amended.

**Response to Action Item from May 2025:**

**Update CAC Members on funding status of cleanup before the September meeting.**

An email was sent to CAC members from A. Engel on 8/8/25 that included a letter from Laboratory Director, JoAnne Hewett with an update.

*August 8, 2025*

*Dear Community Advisory Council Members:*

*Subject: Update Regarding the Building 197 Remediation Project*

*At our last meeting in May, we discussed the status of our request for funding to continue the mercury remediation project at Building 197. At that time, you had asked us to let you know if there were any important developments ahead of our next scheduled meeting in September.*

*I'm writing to you today because the Lab has been notified by the Department of Energy's Office of Environmental Management that they will not be able to fund any additional projects in FY25. Therefore, our request for an additional \$2 million for the Bldg. 197 project was not awarded at this time. Lab management will continue to actively pursue funding avenues to advance the project.*

*At this point, our near-term focus is on securing and stabilizing the site for protection of human health and the environment, and to ensure there is no exposure risk near or beyond the project boundary. We have provided an update on the status of this project to the regulators and are working with them on the development of a remedial status report and stabilization plan for the project until such time that funding is secured to resume remediation activities.*

*If any additional developments take place over the summer, we will provide timely updates to the CAC via email and provide a comprehensive update on the status of the project at the first meeting in September.*

*In the meantime, if you have any questions, please send them to Amy Engel, [aengel@bnl.gov](mailto:aengel@bnl.gov) and we'll respond to the group.*

*Sincerely, JoAnne Hewett Laboratory Director*

#### **4. Environmental Updates, Jason Remien – Manager, Environmental Protection (see presentation)**

Topics covered:

- Building 197 Project status
- Jason Remien explained that BNL has taken a geoprobe just downgradient of the building 197 site and installed a temporary monitoring well in order to take a sample of mercury. He emphasized that they don't expect to find any mercury in the groundwater but want to sample to make sure.
  - Member Esposito asked when the results of the groundwater testing will be available.
  - Remien indicated that we will definitely have the results by the next meeting.
  - Brian Barth said it usually takes 30 days, but they will try to expedite the results.
- Remien said that BNL will be installing a permeable geotextile demarcation layer to prevent the mercury vapors from coming up. He explained that BNL has worked closely with the regulators who have a lot of experience with this method and can attest to the fact that it works well.
  - Member Esposito asked how a permeable layer stops the vapors from escaping.
  - Remien clarified that it's not the actual permeable layer that prevents the vapors from escaping, that layer is used to separate the impacted soil from a layer of clean backfill soil. It's the soil itself that will trap or minimize vapors.

#### **5. Electron Ion Collider Tunnel Cooling Water Design, Charles Folz – EIC Infrastructure Division Director, (see presentation)**

Topics covered:

- Background information.
- System overview-Site plan and layout.
- Piping requirements and design.
- Site plan overview.
  - Member Esposito asked how the wastewater will be treated at 300 pCi/Liter?
  - Folz clarified that it is not wastewater, it is processed water and that if it gets to elevated levels, it will be drained and processed according to Collider Accelerator Department operating procedures.
  - Member Esposito asked what the threshold is. What happens if it had 300 pCi/Liter?
  - Folz answered that it will be trucked off-site by tankers and then evaporated, which is the normal approved permitted process.
  - Remien said that it is going to get sampled every year and it's very unlikely that it will get close to that.
  - Folz said that he did not know if there is an exact established number, but the idea is to maintain it and get it done.
  - Member Perez asked how the cooling water will be treated when the system is drained and what the capacity is in gallons.
  - Folz checked on this information and gave the answer later in the meeting. He said it will be processed as it is drained. There are six systems and each hold about 8,000 gallons, so a total of 48,000 gallons.

- o Member Schuhmann said testing for tritium only once a year does not seem like enough.
- o Folz said he is sure it will be written into the startup procedures to test more often. Testing annually is the established operating procedure.
- o Member Perez asked what the temperature of the cooling water is.
- o Folz answered that it is between 85/90 degrees to 105/110 degrees.

## **6. CAC Member-only discussion on letter written by the subcommittee**

BNL employees left the room so the Community Advisory Council Members and Alternates could discuss a letter written by the CAC subcommittee regarding a request for funding to complete mercury remediation at Brookhaven National Laboratory.

## **7. World's First Technological Advancements from the EIC, Elke Aschenauer – Co-Associate Director, EIC Experimental Program (see presentation)**

Aschenauer spoke about her background.

Topics covered:

- Transitioning from RHIC to EIC
- EIC design overview
- Integrating AI
- Possible funding

Member Schuhmann said that he knows the beamlines are very sensitive and need to be kept away from the walls, so it seems like keeping them bunched together is a risky thing to do. He asked if the beamline has to have a different shape, or if it is all done with magnets.

Aschenauer said, they do not have to have a different shape. She said actually the beams are very small, they are nanometers, and what is happening is that it gives an electromagnetic pulse to the beam, so it turns on. And interestingly, the front of the beam actually gets one pulse and goes in one direction, and the back goes in a different direction from a different pulse. So, we are not moving the beam around, rather it is a very smart electrical pulse and very complex.

Member Karp asked for something like a PET scan, what the timeline is like. How many years before we could possibly see something like this?

Aschenauer responded that the device is already here. It has been developed by a company here in the US, based in Massachusetts. BNL works together with them every day. We need some partners. BNL is working with some people in Stony Brook to look at this, but it takes time before it goes to hospitals.

Member Freeman asked if she is taking into consideration the golden ratio.

Aschenauer said we have a theory about quarks and the mass of each proton. We take into account the spin and we test the theory about the mass ratio. It's not just one measurement we test many measurements against the results.

Member Freeman asked what the basis is for the commonality for all of them. How are you setting that if all of the particles for all of the ratios if they are different?

Aschenauer clarified that the particles don't have different ratios. You look to the observables and all of them have to say that the gluons are dominating because gluons themselves have no mass, we know that. They are pure energy fields, so if you do different measurements, you see that all of them reside in the same energy field and that allows you to test them.

## **8. Community Comment**

- Member Karp suggested the CAC hire an intern.
- Manning said that's a good idea, we will look into it
- Member Schuhmann asked if it is possible to have the online audience visible to the members in the room during the meetings.
- Manning said we will see what we can do. He said it was nice to have dinner together before we meet and perhaps, we can do it again next month.

## **9. Agenda Setting**

- Jason Remien said in the fall, we usually have a presentation on the Site Environmental Report (SER). Next month we will present the groundwater status report and then in November, we will present the rest of the SER.
- Amy Engel said we don't have a science presentation lined up yet, but possibly something on Artificial Intelligence.
- Member Sprintzen suggested a presentation on the background of some of Lab leadership.

Meeting adjourned at 8:33 pm

Next meeting: October 9, 2025



