

**Community Advisory Council
April 11 2013
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. g-2 Relocation Plan
5. Community Comment
6. Agenda Setting Brainstorming Exercise

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: M. Albrecht, D. Allspach, L. Bates, S. Bogart, B. Bookless, J. Carter, F. Crescenzo, N. Detweiler, D. Gibbs, M. Hefty, M. Israel, S. Johnson, E. Lewis, M. Lynch, R. McKay, B. Morse, A. Nunziata, D. Paquette, P. Philp, C. Polly, A. Troutman, M. Voss

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated April 4, 2013. Item number three was available as a handout at the meeting.

1. Draft agenda for April 11, 2013
2. Draft notes for March 14, 2013
3. Copy of presentation on the STP Upgrade

3. Administrative Items

The meeting was called to order at 6:31 p.m. Reed Hodgkin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Doon Gibbs, new Laboratory Director, said he is passionate about Brookhaven; he spoke about the Lab's mission and said there are exciting, challenging opportunities ahead. He said the President's budget for FY14 looks good for RHIC and the Light Source.

Jason Remien, Environmental Protection Division, gave an update on the Sewage Treatment Plant upgrade design modifications which are progressing on or ahead of schedule. He said responses to the NYSDEC and SCDHS comments on the final design are being addressed, the current funding for construction is set at \$1.5M in FY13 and \$1.6M in FY14, the final bid package is being prepared and construction is set to commence in late June and be completed in December 2013. The STP outfall is being removed from the Peconic River and will instead be discharged to recharge basins.

Member Doroski asked what the disc filters are made of and if the sand filter beds will still be used.

Remien said the filters are made of fabric and although the sand filter beds will be left in place, they will no longer be used.

Hodgin asked Remien to bring back updates as they become available.

Lanny Bates told the CAC that a box of industrial explosives was found on April 4th in one of the offices of the NSLS. The box was 6" x 12" and was labeled "Class C Explosives." The emergency response team was called. The box was removed from the building by security and brought to the firing range for evaluation. Suffolk County Police were called and they removed it from the site. Inside the box were nine explosive bridge wire detonators, each about the size of a spark plug for a car. They would require a quick very large current to initiate an explosion. There was no danger. The box originally held ten detonators, only one had been used, for experimental purposes, since 1981. We are looking into why this was left for 30 years.

Member Jordan-Sweet asked if there was a shelf life.

Bates said there was no expiration date written on the box or on the detonators.

Approval of Minutes

As a quorum was not present, approval of the minutes was deferred to next month.

4. g-2 Relocation Plan, Chris Polly, Wilson Fellow & Muon g-2 Project Manager, Fermilab; Terry Emmert, Vice President, Emmert International

Chris Polly, g-2 Project Manager, Fermilab, explained the g-2 experiment that was conducted at Brookhaven and operated from April 1997 through April 2001. The experiment was a test of the validity of the Standard Model and found a greater than three-sigma discrepancy between the theoretical calculation and the measurement of the "magnetic moment" of muon g-2. The level necessary for claiming a new discovery is five-sigma, reaching that level of confidence was beyond the data that researchers at Brookhaven were able to collect. The experiment is being dismantled and moved to DOE's Fermi National Accelerator Laboratory (Fermilab), Batavia, Illinois, where researchers will attempt to collect the additional data needed to reach that five-sigma level of discovery.

Terry Emmert, of Emmert International explained how his company plans to move the 50-foot-diameter cryostats which are made of aluminum and superconducting wire and must be shipped in one piece. The move is expected to take place in June or July of this year. The plan is to move the experiment out of the g-2 experimental hall, stage it near the Main Gate, and transport it by truck south down the William Floyd Parkway overnight, to a waiting barge at the Smith Point Marina. The move will take four to six hours.

Member Peskin said now that the Tevatron is off, how will you energize this piece of equipment?

Polly said there is a booster.

Member Sprintzen asked how fast the transportation vehicle will travel when it has the g-2 on it.

Emmert said five miles per hour. Once loaded, the size will be 14' tall x 50' wide and it will have to pass the Department of Transportation's Level I inspection.

Member Guthy asked if the door to the building is wide enough to get the equipment out.

Emmert said there is what he called a "mail slot," or a removable panel on the side of the building. It will take about two weeks to assemble the transport fixture inside the building, load the experiment on it and get it out of the building. The move will most likely take place at night. The overall barge transportation will take about 30 to 40 days.

Member Feinman asked what improvements will have to be made to at Smith Point for the barge.

Emmert said there will be none; the existing facilities will be used.

Member Jordan-Sweet said one month ago the DOE rated their facilities and Fermilab did not rate very high. Does this project have assured funding?

Polly said funding is tough. Fermi did have a reduction in staff, but this experiment is a high priority.

Member Sprintzen asked how much will the move cost and what would it cost to build a new facility rather than move this old one. Why are you closing the Tevatron?

Polly said the move will cost a total of about \$3M. To start over and build a new one would be about \$70M. The Tevatron ran a successful program; it was financially the right decision to shut it down.

Member Chaudhry asked if the road is structurally capable of handling the weight.

Emmert said the axel load is less than half of what we usually move. This piece is 100,000 pounds, which is quite light. There will be bridge reviews conducted beforehand.

Member Jordan-Sweet said when you were assessing the cost of rebuilding, did you consider advances of making it cheaper or smaller. What is the cost of running it?

Polly said material is expensive and it is a labor intensive process.

Bill Morse said it took six years to build this one.

Polly said we will reuse two of the Tevatron refrigeration units and we use a re-circulating helium system. Everything is done as efficiently as possible. The power consumption of the ring itself is minimal compared to the power used at the beam line.

Member Sprintzen asked what the Lab hopes to find from this running experiment.

Polly said we hope to prove or disprove what was found at Brookhaven.

Member Doroski asked if there is evidence that neutrinos have mass.

Polly said neutrinos definitely have mass.

Gibbs said if you cannot deflect more than 3mm, how much you anticipate that you will deflect during transport.

Polly said there is some cushion. These are not heavy.

Member Sprintzen asked if people will be able to watch the move.

Polly said possibly if it's done during the day.

5. Community Comment

There was no community comment.

6. Request for membership discussion and vote (East Yaphank Chamber of Commerce)

This discussion was deferred until next month as quorum was not achieved.

7. Agenda setting brainstorming exercise

The members of the CAC present contributed ideas for future agenda topics. Each CAC member was then given a set of 6 dots and they voted for the topics they were most interested in having on future agendas. The outcome of the exercise is on the following page.

The meeting adjourned at 8:29 p.m.

Agenda Topics Exercise
April 11, 2013

Biological Research at BNL - 8
Cyber Security & BNL - 7
Ticks & Tick Research - 7
Quantum Physics - 6
Battery Advances & Research - 6
Nanotechnology - 5
BNL & Higgs Boson - 4
Progress Report on Blueprint - 4
Update on Solar Farm - 4
Sustainability - 4
Impacts of Politics on Science - 4
Computational Science - 3
Overview of Science Programs at ISB - 3
Update on Fukushima – Lab Work – 3
Nuclear Safety - 3
Physics Research at BNL - 2
Intellectual Property - 2
Tree Bronzing - 1
Fluctuations in Vacuum - 1
Impact of Fukushima Radiation - 1
Thorium Reactor Energy
Nuclear Energy

| P = Present | 2013 | Affiliation | | First Name | Last Name | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec |
|--------------------|-------------|--|-----------|------------|-----------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| | | ABCO (Garber - 04/02) | Member | Don | Garber | | | | | | | | | | | | |
| | | (Madigan -10/10) | Alternate | Michael | Madigan | P | | | P | | | | | | | | |
| | | American Physical Society | Member | Margaret | Malloy | P | | P | P | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Brookhaven Retired Employees Association (Peskin - 09/09) | Member | Arnie | Peskin | | | P | P | | | | | | | | |
| | | (Franz - 12/09) | Alternate | Eena-Mai | Franz | | P | P | | | | | | | | | |
| | | (Shapiro-1/13) | Alternate | Steve | Shapiro | P | | | | | | | | | | | |
| | | Citizens Campaign for the Environment | Member | Adrienne | Esposito | | P | P | P | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Colonial Woods Whispering Pines (Birben - 06/09) | Member | Christine | Birben | | P | | P | | | | | | | | |
| | | (Rehbein -11/10) | Alternate | Eric | Rehbein | P | P | | | | | | | | | | |
| | | Coram Civic Association (Ziems - 06/12) | Member | Paul | Ziems | P | P | P | P | | | | | | | | |
| | | (Meade – 06/12, Jim M 10/12) | Alternate | Jim | Meade | | | | | | | | | | | | |
| | | East Yaphank Civic Association | Member | Michael | Giacomaro | P | P | P | P | | | | | | | | |
| | | (Feinman - 02/09) | Alternate | Bob | Feinman | P | P | P | P | | | | | | | | |
| | | Emeritus (changed 3/8/12) | Member | Jean | Mannhaupt | | | | | | | | | | | | |
| | | Friends of Brookhaven (Kaplan - 07/01) | Member | Ed | Kaplan | P | | P | | | | | | | | | |
| | | (Schwartz - 11/02) | Alternate | Steve | Schwartz | | | P | | | | | | | | | |
| | | Huntington Breast Cancer Coalition | Member | Mary Joan | Shea | P | | P | | | | | | | | | |
| | | | Alternate | Scott | Carlin | | P | | | | | | | | | | |
| | | IBEW/Local 2230 (Krsnak 01/07) | Member | Scott | Krsnak | P | | | | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Individual (changed 3/12) | Member | Karen | Blumer | | | | | | | | | | | | |
| | | (added 6/12) | Alternate | Michael | Madigan | | | P | | | | | | | | | |
| | | Individual – (changed 3/12) | Member | Greg | Bush | | | | | | | | | | | | |
| | | | Alternate | Adam | Martin | | | | | | | | | | | | |
| | | | Alternate | Bruce | Martin | | | | | | | | | | | | |
| | | Individual – (changed 3/12) | Member | Jane | Corrarino | | | P | | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Individual – (changed 3/12) | Member | Iqbal | Chaudhry | P | | P | P | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | L.I. Pine Barrens Society | Member | Richard | Amper | P | P | | | | | | | | | | |

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|--------------------|-------------|---|-----------|------------|--------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| | | (Murdocco - 04/11, deleted 6/12) (Muller added – 8/12) | Alternate | Alexandra | Muller | P | | P | P | | | | | | | | |
| | | L.I. Progressive Coalition | Member | David | Sprintzen | P | | P | P | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Lake Panamoka Civic Association (Biss - 04/02) | Member | Rita | Biss | | | | | | | | | | | | |
| | | (Grandal - 10/10) | Alternate | Bonita | Grandal | | P | | | | | | | | | | |
| | | Longwood Central School Dist. (Castro -06/09) | Member | Maria | Castro | | | | | | | | | | | | |
| | | | Alternate | Allan | Gerstenlauer | | | | | | | | | | | | |
| | | Mastic Park Civic Association (Sicignano – 6/12) | Member | John | Sicignano | | | P | | | | | | | | | |
| | | | Alternate | Clara | McManus | | | | | | | | | | | | |
| | | Middle Island Civic Association | Member | Tom | Talbot | P | P | P | | | | | | | | | |
| | | | Alternate | Kevin | Crowley | | | | | | | | | | | | |
| | | NSLS Users Committee | Member | Jean | Jordan-Sweet | P | P | P | P | | | | | | | | |
| | | (Ravel -02/11) | Alternate | Bruce | Ravel | | | | | | | | | | | | |
| | | Ridge Civic Association | Member | Pat | Henagan | P | P | P | P | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Town of Brookhaven (Graves - 06/06) | Member | Anthony | Graves | | | | | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Town of Brookhaven, Senior Citizens Office | Member | James | Heil | P | | P | | | | | | | | | |
| | | | Alternate | | | | | | | | | | | | | | |
| | | Town of Riverhead (Doroski - 04/11) | Member | Isidore | Doroski | P | | | P | | | | | | | | |
| | | (Hulme - 04/11) | Alternate | Suzanne | Hulme | | | P | | | | | | | | | |
| | | Wading River Civic Association | Member | Helga | Guthy | | P | P | P | | | | | | | | |
| | | | Alternate | Sid | Bail | | | | | | | | | | | | |