Community Advisory Council March 8, 2012 Action Items/Notes



These notes are in the following order:

- 1. Attendance
- 2. Correspondence and Handouts
- 3. Administrative Items
- 4. 21st Century National Security Mission at BNL
- 5. Agenda Setting
- 6. Community Comment
- 7. Membership Subcommittee Report & CAC Discussion

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: C. Bevington, S. Bogart, M. Cordaro, J. D'Ascoli, L. Garber, D. Gibbs, K. Geiger, G. Goode, M. Holland, S. Johnson, M. Johnston, C. Kessler, L. Lyons, R. McKay, A. Nunziata, D. Paquette, A. Rapiejko, D. Rocco

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated March 1, 2012. Items numbered three through six were available as handouts at the meeting.

- 1. Draft agenda for March 8, 2012
- 2. Draft notes for February 9, 2012
- 3. Revised draft agenda
- 4. Brookhaven Graphite Research Reactor (BGRR) Presentation Diane Rocco, Director Environmental Restoration Projects
- 5. The 21st Century National Security Mission at BNL Carol Kessler, Department Chair Nonproliferation and National Security
- 6. List of recommended CAC member organizations and number of representatives from subcommittee

3. Administrative Items

The meeting began at 6:35 p.m. Reed Hodgin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

George Goode, Assistant Laboratory Director for Environment, Safety, and Health, told the CAC that sadly, Chuck Armitage, former Environmental Restoration Project Manager, passed away on February 27th.

Doon Gibbs, Deputy Director for Science and Technology, said that Sam Aronson announced he will be stepping down as Lab Director and that he will be returning to research. Brookhaven Science Associates is establishing a committee that will conduct an international search for a new Director. The committee will develop a list of possible candidates and will also accept recommendations, including those made via a website that is being developed. The process is expected to take from six to nine months. Dr. Aronson will stay in his current role until a new Director is named.

Member Birben said she would like to congratulate Dr. Aronson on being selected as Laboratory Director of the Year for Tech Transfer Impacts.

Member Sprintzen asked if there is a preference for someone already working at the Laboratory.

Gibbs said no, the search is open. BSA will make the final decision.

Member Guthy asked if there were term limits to the position of Director.

Gibbs said there is no fixed term at the Lab, however, there may be at other National Laboratories.

Member Blumer asked about the process for looking for a new Director.

Gibbs said the search committee will put together a list of possible candidates as well as accept suggestions and self-nominations.

Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the February 9, 2012 draft notes. Member Birben said that on page two, the list of those volunteering to serve on the subcommittee on membership categories should not include Member Rehbein (he did not volunteer himself, he was volunteering her). The notes were approved as amended with none opposed and three abstentions.

BGRR Update

Diane Rocco, Environmental Restoration Projects Director, gave an update on the demolition of the BGRR. She said the concrete floor has been poured, the enclosure tent is down, a rail shipment left the Lab on February 25th and another one is scheduled for early April.

Member Guthy asked if the building is safe now to enter.

Rocco said it is still being treated as a contaminated area. Controls are being lifted a little at a time. The area is controlled by rad-con.

Member Blumer asked how many more waste shipments are expected.

Rocco said two; one in April and one in May.

Member Esposito asked if the negative air pressure controls are gone.

Rocco said yes, the HEPA filters and the fan units have all been removed and we are finding other DOE sites interested in using the demolition equipment now that we are finished with it.

We are now working on the ROD requirement actions. There is an area under the center of the building called the deep pit. We realized that during the bioshield demolition process rubble and some grating had fallen down into the pit, so we had planned to go in and remove those things, decontaminate it as necessary, apply fixative and then pour the final floor. When we went in to the deep pit, we discovered that there was water in it. The deep pit has a shaft that comes up through the bioshield floor which was open during the demolition of the bioshield. There was grating put over it, but equipment had knocked it out of the way and dented it, so we knew that things had fallen down into the shaft. The pit had been previously cleaned out and fixative was applied to the interior surfaces in 2005. We had been watching it for water infiltration from the ground, but we did not think the water would run down the shaft from our misting for dust suppression operations, but that is what appears to have happened.

Member Esposito asked how deep the pit is.

Rocco said 20 feet.

On Friday when we went in to clean out the pit, we found about 4,000 gallons of water. We did some initial field measurements on a sample and found cesium and tritium because it was water that had washed down over the debris of the bioshield. Dust suppression went on in the bioshield between October and December of 2011. When we were using the big excavator, it was generating a lot of dust, making it difficult to see, so we brought in a mister to keep the dust down. We believe that is when this water accumulated in the pit.

Member Kaplan asked if the water percolated through the soil before entering the pit.

Rocco said no, it entered through the shaft that went into the pit.

Member Esposito asked if it consisted of water and dust particles.

Rocco said yes, and some foam, debris, and grating material.

The water has been pumped out and it is now in containers in the Waste Management Facility. The intention is to solidify it and send it to the Nevada Test Site. We are going in the pit later this week and next week to clean all the debris and rubble out of the bottom of the pit. We will again apply sealant to the walls of the pit and install a leak detector. Until then, we will visually inspect it once a week, but, we don't anticipate any more water getting into the pit, because since we poured the concrete floor on the bioshield, we have blocked the hole.

Member Esposito asked if the high levels of cesium and tritium in the water will cause higher levels of radioactivity in the debris that was in the pit area.

Rocco said it's a very low level. It's not going to make a difference to the waste material. It will add a very small amount.

George Goode said the water became contaminated because of the concrete rubble. That's where the contamination came from, so the concrete is more radioactive than the water.

Member Esposito said the dust had some radioactivity, but the highest levels are in the concrete.

Rocco said yes, the containers that we put the waste into will range from 12 – 20mr/hr on contact; the containers of water were less than 1. So, compared to the normal routine waste that we have been working with, this is pretty low level.

Member Kaplan asked if the pit was sealed in 2005, why does it need to be done again. Did the old sealer fail?

Rocco said now there is new removable contamination. Because there is no future use for the pit, it's cost effective to seal it in so it can't move anywhere. The old sealer did not fail; new contamination has been introduced onto the walls and the floor.

Member Esposito said she wanted to clarify that 1.3 million pCi/L of cesium is not considered low level.

Member Chaudhry asked if it was anticipated that the misting would cause the water to run down into the pit or was this totally unexpected.

Rocco said we did not anticipate it. We thought the water was being absorbed by the concrete rubble on the floor.

Member Garber asked if there was any evidence of new water after the pit was pumped out and dried.

Rocco said no, we pumped out about 4,000 gallons. We are confident the water came from misting. There has been no new water.

Member Blumer asked what the sealant is made of and if it is expected to be there forever.

Rocco said it is a form of paint and will last a long time. She said after cleanup, the cap and the building will be routinely inspected by the Environmental Protection Group.

Member Chaudhry asked what is involved in the inspection of the building and cap.

Rocco said it is a visual inspection. They look for cracks in the asphalt cap, joints to the building, leaks in the roof, and any other degradation to the building.

Member Garber asked if there is any future use for the facility. It is an historic building.

Rocco said probably not, maybe for storage. There is nothing viable in the immediate future.

Reed asked Rocco to come back to the CAC with periodic updates.

4. 21st Century National Security Mission at BNL – Carol Kessler, Chair Nonproliferation and National Security Department

Carol Kessler told the CAC that Nonproliferation and National Security is a priority at BNL. She said the mission is to protect the public from weapons of mass destruction and to develop tools and equipment to enable the International Atomic Energy Agency (IAEA) to locate and safeguard them. Homeland Security is a national and regional priority.

Member Sprintzen asked if the IAEA has the capacity to enter a country based solely on that country giving its permission and if so, has the US given permission.

Kessler said yes to both.

Member Sprintzen asked which countries have not given permission.

Kessler said India, Pakistan, and Israel are not members. In 1995, the IAEA was strengthened and given permission to go into the secret facilities of countries to seek out nuclear weapons. BNL works with the IAEA to try and get into those facilities. We help them convince countries to let them in.

Member Sprintzen said, so we don't know what is going on in India, Pakistan, or Israel.

Kessler said that is correct. Pakistan has allowed them in to inspect two facilities, India has allowed them into several, and Israel has allowed them in to inspect one facility. So, the IAEA does not have a good handle on what is going on in those countries. However, the concern is with Iran. They won't allow the IAEA to come in and look at whatever they want.

Member Malloy asked how these international inspections are funded.

Kessler said this is a UN-based agency. All the member countries contribute to the cost of operations based on their GDP.

Member Talbot asked for an estimate of how much plutonium is currently under safeguard compared to the total amount that exists in the world.

Kessler said she does not have that information. There are people that track that information and have been keeping track for 30 years. They do keep a count. When the IAEA goes into a country to verify that information is kept between it and the country unless there's a problem. We do our best to estimate it and I can give you a website with some information.

ACTION ITEM: Provide website with information on how much plutonium is under IAEA safeguard compared to the amount estimated to exist.

Member Guthy asked for a definition of the word proliferation.

Kessler said the idea is that if you have a small amount of nuclear material and then you start to add to it, you can start creating reactions among the parts of the nuclear material and cause an explosion. It proliferates.

Member Blumer asked if the Lab coordinates with Homeland Security. Do they target terrorists?

Kessler said we are developing detectors that can track and detect nuclear materials in cars and ships. We work with the Department of Homeland Security to develop better methods to determine who would have access to those materials. We have an expert in explosives who is helping the police, and we will be conducting training programs here for transportation security officials.

Member Garber said non-proliferation is the effort to prevent countries from getting those nuclear capabilities.

Member Murdocco asked if they are installing detectors in suburban areas.

Kessler said particularly in New York City.

Member Peskin asked what percentage of this work is classified.

Kessler said 3 out of 65 people work part-time on classified information. It's a very small percentage.

5. Agenda Setting

Nora Detweiler, liaison to the CAC, said that next month Tim Green will give a presentation on the "Four Poster" technology for tick and deer control, Stephanie Hamilton will give a presentation on Smart Grid, and there will be a follow-up on CAC membership. In May, Reinhold Mann will give a presentation on the Environmental Life Science Directorate. She asked if there was anything else the CAC would like to see on the agenda.

Member Blumer said while being tested recently for Lyme disease, she was tested for heavy metals and it was discovered that she has high levels of cesium and thallium and her levels for lead and mercury are off the charts. She asked if it would be possible or appropriate for Dr. Falco to give a presentation on the results from the former worker testing that was done. She asked for a report on what the bell curve looks like. She said she is interested to see if other people are high in cesium also.

Detweiler said she will look into and get back to her.

Doon Gibbs said medical records are confidential and cannot be discussed.

Member Blumer said she was looking for an analysis, not individual information. It would be enlightening.

Hodgin said Michael Holland will also be on the agenda, giving a presentation on the role of DOE at BNL.

6. Community Comment

Mary Ann Johnston, ABCO President, said she wanted to follow up on Member Blumer's comment. She said without disclosing the nature or identity of the employees, if Member Blumer is experiencing high levels and is concerned, it might be something other employees are experiencing. It might be worthwhile for the Lab to find out, not to make it public, but those people need to know.

Member Esposito reminded the CAC that BNL and Citizen's Campaign for the Environment (CCE) are co-sponsoring a Long Island Earth Summit on April 17th. She said this free event. There will be a tour of the Long Island Solar Farm, which you must register for in advance. Information will be available beginning next week on the CCE and BNL websites. You will also be receiving an email with additional information. Workshops have been scheduled. The keynote speaker will be Dr. Ellen Pikitch from Stony Brook University on the issue of Oceans. A panel discussion will take place at 3 pm on "Long Island's greatest environmental challenges". You can choose which workshops you would like to go to. All are welcome. We strongly encourage advance registration so you can choose the workshop that you want. Any other questions please see me during the break.

Hodgin asked for CAC council members only to return after the break for the membership discussion.

The CAC went into Executive Session at 8:25 p.m.

Following the Executive Session, the meeting adjourned at 9:40 p.m.

Agenda Topics February 10, 2011 Poll

Homeland Security - 9

Nanotechnology Developments & Standards – 7 (3/10/2011 - E. Mendez)

Science & Politics – 7

Overview of BNL Land Use Plan - 6

Sustainability – 6

Photovoltaics – 6 (3/10/2011 - E. Mendez and R. Lofaro)

PET/MRI Research - 6

LISF Tour Prior to Completion – 6 (11/18/11 – ribbon cutting)

Business/Lab Integration of New Technologies - 6 (4/14/11 - Walter Copan)

Nano Patterning – 5

Natural Resources Management Plan – 5 (12/8/11 – Tim Green)

Nuclear Non Proliferation – 4 (3/8/12 – Carol Kessler)

Nuclear Safety – 4

Catalysis & Super Conducting Magnets – 3

Cosmology – 3

Accelerate Long Island (as information becomes available) - 3

Safety Progress – 2

CRADAS - 2

Radio Isotopes – 2

- - 1

Technology Transfer - 0 (4/14/11 - W. Copan)

| P = Present 2012 Affiliation | | First Name | Last Name | Jan | Feb | Mar | Apr | Мау | June | July | Aug | Sep | Oct | Nov | Dec |
|-----------------------------------------------------------|-----------|------------|-----------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| ABCO (Garber - 04/02) | Member | Don | Garber | Р | Р | Р | | | | | | | | | |
| ABCO (Madigan -10/10) | Alternate | Michael | Madigan | Р | | Р | | | | | | | | | |
| American Physical Society | Member | Margaret | Malloy | Р | Р | Р | | | | | | | | | |
| American Physical Society | Alternate | | | | | | | | | | | | | | |
| Brookhaven Retired Employees Association (Peskin - 09/09) | Member | Arnie | Peskin | | Р | Р | | | | | | | | | |
| Brookhaven Retired Employees Association (Franz - 12/09) | Alternate | Eena-Mai | Franz | Р | Р | Р | | | | | | | | | |
| Citizens Campaign for the Environment | Member | Adrienne | Esposito | Р | Р | Р | | | | | | | | | |
| Citizens Campaign for the Environment | Alternate | | | | | | | | | | | | | | |
| Colonial Woods Whispering Pines (Birben - 06/09) | Member | Christine | Birben | Р | Р | Р | | | | | | | | | |
| Colonial Woods Whispering Pines (Rehbein -11/10) | Alternate | Eric | Rehbein | Р | Р | Р | | | | | | | | | |
| E. Yaphank Civic Association | Member | Michael | Giacomaro | Р | Р | Р | | | | | | | | | |
| E. Yaphank Civic Association (Feinman - 02/09) | Alternate | Bob | Feinman | Р | | Р | | | | | | | | | |
| Emeritus (changed 3/8/12) | Member | Jean | Mannhaupt | | | | | | | | | | | | |
| Friends of Brookhaven (Kaplan - 07/01) | Member | Ed | Kaplan | | | Р | | | | | | | | | |
| Friends of Brookhaven (Schwartz - 11/02) | Alternate | Steve | Schwartz | Р | | | | | | | | | | | |
| Huntington Breast Cancer Coalition | Member | Mary Joan | Shea | Р | | | | | | | | | | | |
| Huntington Breast Cancer Coalition | Alternate | Scott | Carlin | | | | | | | | | | | | |
| IBEW/Local 2230 (Krsnak 01/07) | Member | Scott | Krsnak | Р | Р | | | | | | | | | | |
| IBEW/Local 2230 | Alternate | | | | | | | | | | | | | | |
| Individual (changed 3/12) | Member | Karen | Blumer | Р | | Р | | | | | | | | | |
| | Alternate | | | | | | | | | | | | | | |
| Individual – (changed 3/12) | Member | Greg | Bush | Р | | Р | | | | | | | | | |
| | Alternate | Adam | Martin | Р | | | | | | | | | | | |
| | Alternate | Bruce | Martin | Р | | | | | | | | | | | |
| Individual – (changed 3/12) | Member | Jane | Corrarino | | Р | | | | | | | | | | |
| | Alternate | | | | | | | | | | | | | | |
| Individual – (changed 3/12) | Member | Iqbal | Chaudhry | | Р | Р | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| L.I. Pine Barrens Society | Member | Richard | Amper | | | | | | | | | | | | |
| L.I. Pine Barrens Society (Murdocco - 04/11) | Alternate | Richard | Murdocco | Р | Р | Р | | | | | | | | | |
| L.I. Progressive Coalition | Member | | Sprintzen | Р | Р | Р | | | | | | | | | |
| L.I. Progressive Coalition | Alternate | | | | | | | | | | | | | | |

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| P = Present | 2012 | Affiliation | | First Name | Last Name | | | | | | | | | | | | |
| Lake Panamoka Civic Ass | ociation (Biss - 04/0 | 02) | Member | Rita | Biss | | Р | Р | | | | | | | | | |
| Lake Panamoka Civic Association (Grandal - 10/10) | | Alternate | Bonita | Grandal | | Р | | | | | | | | | | | |
| Longwood Alliance | | | Member | Tom | Talbot | | | Р | | | | | | | | | |
| Longwood Alliance | | Alternate | Kevin | Crowley | | | | | | | | | | | | | |
| Longwood Central School Dist. (Castro -06/09) | | Member | Maria | Castro | | Р | | | | | | | | | | | |
| Longwood Central School | Dist. | | Alternate | Allan | Gerstenlauer | | | | | | | | | | | | |
| NSLS User | | | Member | Jean | Jordan-Sweet | | Р | Р | | | | | | | | | |
| NSLS User (Ravel -02/11) | | | Alternate | Bruce | Ravel | Р | | Р | | | | | | | | | |
| Ridge Civic Association | | | Member | Pat | Henagan | | Р | Р | | | | | | | | | |
| Ridge Civic Association | | | Alternate | | | | | | | | | | | | | | |
| Town of Brookhaven (Graves - 06/06) | | Member | Anthony | Graves | | | | | | | | | | | | | |
| Town of Brookhaven | | | Alternate | | | | | | | | | | | | | | |
| Town of Brookhaven, Senior Citizens Office | | Member | James | Heil | Р | Р | Р | | | | | | | | | | |
| Town of Brookhaven, Sen | ior Citizens Office | | Alternate | | | | | | | | | | | | | | |
| Town of Riverhead (Doroski - 04/11) | | Member | Isidore | Doroski | | Р | | | | | | | | | | | |
| Town of Riverhead (Hulme - 04/11) | | Alternate | Suzanne | Hulme | Р | Р | Р | | | | | | | | | | |
| Wading River Civic Associ | ation | | Member | Helga | Guthy | Р | Р | Р | | | | | | | | | |
| Wading River Civic Associ | ation | | Alternate | Sid | Bail | | | | | | | | | | | | |