

**Community Advisory Council  
June 11, 2009  
Action Items/Notes**

*Final*

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. Update on Environmental Issues, Robert Lee, Environmental Protection Division
5. Tick Hazard Briefing, Robert Selvey, Industrial Hygienist, Safety & Health Services Division
6. Agenda Setting
7. Community Comment
8. 2008 Annual Peconic River Sampling Report, Skip Medeiros, Environmental Protection Division

**1. Attendance**

Members/Alternates Present:  
See Attached Sheets.

Others Present:

M. Bebon, C. Birben, J. Carter, J. D'Ascoli, N. Detweiler, B. Dorsch, P. Fontaine, L. Garber, G. Goode, T. Green, B. Howe, S. Johnson, T. Kneitel, M. Lynch, R. McKay, C. Parnell, S. Penn, A. Rapiejko

**2. Correspondence and Handouts**

Items numbered one through five were mailed with a cover letter dated June 5, 2009. Items six through eight were available as handouts at the meeting.

1. June 11, 2009 draft agenda
2. Draft notes for April 15, 2009
3. Draft notes for May 14, 2009
4. Copy of correspondence regarding the CAC SPDES recommendation
5. Copy of the HFBR ROD press release
6. Copy of Presentation on the Environmental Evaluation of the NSLS II Construction Site
7. Copy of Tick Hazard Briefing Presentation
8. Copy of 2008 Peconic River Monitoring Report Highlights

**3. Administrative Items**

The meeting began at 6:34 p.m. Reed Hodgkin reviewed the ground rules and the draft agenda. Those in attendance introduced themselves.

## Approval of Minutes

Reed asked for corrections, additions or deletions to the April 15, 2009 draft notes. The notes were approved with no corrections and five abstentions. Reed then asked for corrections, additions or deletions to the May 14, 2009 draft notes. Member Blumer noted that on page two when she asked if it would be possible to have a scientist join the CAC when they go out to see the Peconic River, her intention was for a group of scientists that had previously gone with them to come along again. The notes were approved as corrected with four abstentions.

D'Ascoli announced that Barbara Henigin, CAC member representing the Longwood School District, was retiring from the school district and will therefore be retiring from her position on the CAC. She thanked her for her participation on the CAC and presented her with a gift from the Lab. Henigin introduced Dr. Maria Castro as her replacement.

The CAC commended her for her eight years of service.

Reed said that because quorum was not met last month the CAC was unable to make an official recommendation to the Lab regarding the SPDES permit. He suggested that in the future, the CAC members try to be present when there are important issues being decided and when an important speaker has been invited to address them.

Member Sprintzen asked if there is anything in the bylaws regarding attendance at CAC meetings. He wondered if there were chronic non-attendees and if there are, should they be removed from membership.

Member Giacomaro asked if there was a policy that said after three missed meetings, a member would be contacted to find out their status.

D'Ascoli said the Lab does not contact members unless the CAC informs them that they would like them to contact the member. She suggested reviewing the membership policy in the charter.

Member Garber said last month there was a conflicting event that probably was the cause of the low attendance.

Reed said if there is a conflicting event, perhaps the Lab could be notified.

Michael Bebon, Deputy Director for Operations, invited the CAC to the groundbreaking ceremony for the NSLS II to be held on June 15, 2009. Jeanne D'Ascoli noted that there was a time change and the event will begin one half hour earlier than originally anticipated. She also said that Longwood's Jazz Band will be performing and lunch would be available for all attending.

Member Giacomaro asked where the event will take place and how long it will be.

D'Ascoli said it will be held in the parking lot just past the Center for Functional Nanomaterials. Busses will take visitors to the event area from the Berkner Hall parking lot. The event will end at 11:15 a.m. followed by lunch.

Reed told the CAC that there are CDs available from Vicki Colvin's May talk on nanomaterials for anyone interested.

#### **4. Update on Environmental Issues, Robert Lee, Environmental Protection Division**

Robert Lee told CAC members that their comments on the SPDES permit were received and transmitted by Dr. Aronson to the state. They are presently being reviewed and it is expected that a permit will be issued soon, with a hopeful effective date of July 1. As soon as the Lab receives the resolution of comments, it will be passed on to the CAC.

Lee explained that before the Laboratory can spend a significant amount of money on a project such as construction of the NSLS II, they must complete an Environmental Assessment under the National Environmental Policy Act (NEPA).

Member Talbot asked if the Laboratory is subject to New York State's SEQRA (State Environmental Quality Review Act) process.

Lee said the Lab is subject to NEPA, which is the federal equivalent to the state's SEQRA review. The environmental review looks at the impacts of construction and operations. The archeological review that was done in 2006 found no culturally significant features. There was a Finding of No Significant Impact (FONSI) issued in October of 2006, which means that construction can move forward. The Laboratory self-initiated a review of the site in 2007 to identify any potential environmental concerns early in the construction planning process. Lee showed a map of the construction site and indicated areas with historical features that included gasoline service pumps, coal storage, and later, fuel oil tanks, boiler facilities, the former landfill, vehicle repair, and open fields to the east. During the Lab's occupancy of the area there were many industrial-type activities such as machine shops, warehouses, metal degreasing, chemical storage, and scrap metal storage.

Member Giacomaro asked if there were tanks associated with the gas service pumps and if monitoring had been done in the area.

Lee said there was a 12,000 gallon underground storage tank that was abandoned and backfilled with dirt. It was checked and no downstream contamination of gasoline was found. It is still in the ground and will be addressed as construction of the NSLS II begins. The Lab has a systematic demolition process onsite to maximize removal of hazardous materials and minimize landfill disposal. Seven drywells have been sampled and closed. Soil and groundwater samples have been collected and no remnants of former degreasing operations were found. Many of the physical obstructions have been removed.

Member Giacomaro asked if the underground tank was made of steel and if that would have any negative impact on the magnetic operations at the Light Source.

Lee said it is made of steel, but it shouldn't cause any impact on the operations because it would be outside of the building. He said site preparation for construction began in October 2008. Fencing and storm water erosion controls were installed, utilities were isolated, and site clearing was completed. There were a few findings in the field during the pre-construction phase. Polyethylene piping was discovered in the eastern fields and 250 gallons of glycol/water was recovered. There was a 550 gallon underground storage tank discovered near the former location of Bldg. T-89, with 15 gallons of fuel/water recovered and 20 yards of impacted soil removed. A drywell was found in the area east of Bldg. 207 which was sampled and found to meet Suffolk County clean-up criteria. All events were addressed immediately and to the satisfaction of the N.Y.S. Dept. of Environmental Conservation and/or Suffolk County Dept. of Health Services.

Member Schwartz asked if there were any radiological issues associated with any of the findings.

Lee said a walk-over radiation survey was done in areas of suspicion and none was found.

Member Giacomaro asked if it is possible that the sand that was used to fill the underground storage tank could have become contaminated with any residue in the bottom of the tank.

Lee said the tank was emptied first, however, it is possible that a small amount of residue could be left in the bottom

Member Chaudhry said if one tank was discovered that no one knew about is it possible there could be others.

Lee said that is the reason for doing the environmental evaluation. Excavation of the site has been completed and nothing else was discovered. We are constantly telling the contractor to be on the alert for unexpected things. It's not that we didn't know about these things, we knew research was conducted, but at the time we were told it had been emptied out and there was no physical evidence to the contrary.

Member Giacomaro asked if there was any documentation as to the presence of these tanks and what their purpose was.

Lee said no, we knew research was done, but there was no evidence anything was left. We knew the piping was there, but had been told the glycol had been removed.

Reed said it is important to remember that there are processes in place to Stop Work when something unusual is discovered.

## **5. Tick Hazard Briefing, Robert Selvey, Industrial Hygienist, Safety & Health Services Division**

Bob Selvey explained that an Industrial Hygienist is someone who protects workers from health hazards. One health hazard at Brookhaven, simply because of its location, is tick-related illnesses. We are in the area with the highest occurrence of Lyme disease in the world. There are three types of ticks on Long Island; deer tick, dog tick, and the lone star tick. Each type of tick carries its own type of disease and is not capable of carrying the illnesses of the others. Deer ticks carry Lyme disease and babesiosis, Rocky Mountain spotted fever is the dog tick illness, and the lone star tick carries ehrlichiosis and STARI (southern tick associated rash illness).

Member Giacomaro asked which illness is the worst.

Selvey said Rocky Mountain spotted fever is by far the most serious illness. Lyme disease is the worst as far as long term diseases. Years ago most ticks were the dog tick variety and the lone star tick was extremely rare. Now, 80% of the ticks are lone star. This year, however, we are seeing more dog ticks. The number of deer ticks, approximately 15%, has not changed.

Member Blumer asked where those statistics came from.

Selvey said these are his own statistics based on his research on-site.

Member Giacomaro asked what caused the change in percentages.

Selvey said the increase in the wildlife population at the Lab and no natural predator for the tick probably have been the causes of the increase in the population of ticks onsite.

Tim Green, Natural and Cultural Resource Manager at BNL, said the lone star tick is extremely aggressive and will go out in search of a host rather than wait for one to come along.

Selvey explained that the key is to break the barrier from the tick to the host. He explained that ticks are extremely small and tend to be located in groups. In the larvae stage, they are not infected with disease. Summer time is when the nymphs are out. Spring and fall is when the adult tick is present. Ticks have a two-year lifecycle. They only live on blood from a host. They smell CO<sub>2</sub> and that is how they know a host is nearby. Spraying foliage with tick repellent has very little impact. Once they grab on to a host, they insert a tube like structure and inject anticoagulants and glue. They will continue to suck in and spit out for a 24 – 76 hour period. Generally they don't hurt or itch. Once bitten, he said you should not burn the tick with a match, cover with Vaseline, squeeze it, or wait for it to fall off. You should use tweezers and pull gently at the head. Remove the tick as soon as possible, within 24 hours, to reduce risk of disease and wash your hands and skin. You should record the date of the bite and watch for symptoms. You will likely find ticks in areas of tall grass and shrubs. It is possible to find them in low grassy area, mown lawns, and on low tree branches. It is unlikely you will find them on roads, sand, and tall trees.

Member Giacomaro asked if ticks climb trees.

Selvey said most ticks are blind, so they don't usually climb. They will be found in low areas.

Member Heil asked how field testing is done.

Selvey said they use a white flannel sheet, which is dragged over an area to see how many ticks will grab on. Adult ticks climb into shrubs at sock to waist height, nymphs are picked up at sock to knee level, and larvae are picked up at the shoe level. The best protection you can use is to put a barrier between yourself and the tick. Socks should be tucked into pants or the legs taped, wear light colored clothing. Remove clothing within one hour of being in woods, shower soon after being in woods, and put clothes into a hot dryer or plastic bag. Repellants containing DEET are useful in deterring bites when walking through chigger and tick infested areas. Permethrin, which is for clothing only, is useful also, but should not be used as a sole line of defense. There is a vaccine available for pets, but there is none approved for humans.

Member Anker asked if Frontline works for pets.

Selvey said it is an acceptable product to kill the ticks.

Member Conklin asked how effective landscape spraying is.

Selvey said Home Depot sells a product that a commercial sprayer cannot spray on your yard, but you as a homeowner can. This will kill any ticks that are out, but it doesn't last.

Member Garber asked why the need to wear light colored clothing.

Selvey said it is so you can see the ticks better if they climb onto you.

Member Guthy commented that she has not seen many dog ticks lately; they seem to have been overtaken by deer ticks. She also said she has had been bitten and she finds the bite to be very itchy.

Member Giacomaro said he thought some insects, like the praying mantis, were natural predators.

Selvey said it's possible that some insects may eat ticks, but not enough to make a difference.

Member Henagan said there is a new medical protocol that says if you get to a doctor within 72 hours of the bite, they will give you a single dose of doxycycline, which has been found to be very effective in knocking out most of the tick borne diseases. He also asked if there is evidence of chiggers or are they really tick larvae.

Selvey said he has heard of people who have seen chiggers and believes they are definitely present.

Member Schwartz asked if someone gets bitten by a tick, should they bring it in for examination.

Selvey said he gets a lot and if it is a deer tick and has bitten someone, they can send it to a lab for testing.

Member Heil asked what stage the tick is at during the winter and if the severe weather affects them at all.

Selvey said during the winter they are either adults or in the larvae stage. It seems to always be a good year for ticks. They bury themselves in the ground.

## **6. Agenda Setting**

Jeanne D'Ascoli told the CAC that it seems October would be the best time to take a field trip to the Peconic River. She said that it will be difficult to put together agendas for the summer months, so she would like the CAC to consider taking the summer off and resume meeting in September. Future agenda topics would include groundwater reporting, the Site Environmental Report, an update on the solar project, nano regulations, a SPDES update, feedback on the HFBR ROD, D&D for the BGRR, ARRA funding, and a presentation on energy. She also said that brainstorming could be done in September to add topics and prioritize them.

Member Sprintzen said he read an article in Newsday by Robert Crease talking about the Joint Photon Science Institute and its affiliation with the NSLS II; he was interested in a presentation on that topic.

D'Ascoli said she would add that to the list. She said Dr. Steve Dierker would be the one to give a presentation on that topic.

Reed asked the CAC if it would be ok to take time off during July and August.

The CAC agreed to take off for the summer months.

## **7. Community Comment**

Christine Birben made a request for membership to the CAC.

Reed explained the process to invite new members to the CAC.

Birben told the CAC that she has been at their last five meetings. She said her son has participated in many Lab sponsored programs. She works as a private duty nurse and lives in the Colonial Woods Whispering Pines community and would like to be known as the next door neighbor. There are 544 homes with 1,500 residents in her community and she knows at least

30 people who have had treatment for or who have had Lyme disease. Last year, she volunteered for the Wm. Floyd highway cleanup for the town of Brookhaven.

Member Blumer asked her what group she is representing.

Birben said Colonial Woods Whispering Pines, which is the condominium association located across the street from the Laboratory.

Member Giacomaro asked if she has a title and if she is part of the association or a Board member. He asked if she has spoken to the Board about representing them.

Birben said she is not a Board member and has not asked them about being their representative, but she has spoken to many community members and would like to be considered the next-door neighbor.

Member Schwartz asked if she has an alternate.

Birben said she does not, but has several in mind and one of them is a Board member.

Member Conklin asked what her professional background is.

Birben replied that she has been in the healthcare field for the past 15-20 years and has been on private duty for the last 10 years.

Reed said all that is necessary to have an alternate is to find someone who will sit in when you cannot be here. Ms. Birben is looking to bring to the CAC her perspective as a community member. He then asked her to step outside while the CAC discussed her request for membership.

Member Sprintzen asked where she would fit in as far as a membership category and if there were openings.

D'Ascoli said there is an opening under the Civic category.

Member Talbot asked what her organization is. Some members represent an individual and perhaps she would fit in there.

Reed said her category would be neighbor.

Member Giacomaro said she is not a member of a civic organization. She may be a civic-minded individual. Perhaps we should notify Whispering Pines that she is here as a member of their community.

(\*Note – for the record, Christine Birben is a member of Yaphank Civic Association.)

Reed said she is not representing a standard category. She would be representing herself as a community member.

Member Henagan asked if the charter is open to individuals or only organizations.

Reed said originally it was set up to invite organizations, but there are categories of interest that are sometimes represented by individuals.

Member Blumer asked if there is a limit to the number of members the CAC can have.

D'Ascoli said the cap is 32. She also said Jane Corrarino represents herself in the Health category.

Member Anker said she likes the fact that Ms. Birben participates in events at the Lab and that she is supportive of youth.

Member Chaudhry said most CAC members represent groups, but not all. He said he feels that Birben can make a contribution due to her background in the health field.

Member Campbell said originally organizations were invited to designate individuals. It was then the individual that was the member, not the organizations. The CAC was meant to be a two-way street, to communicate the interests of a segment of the community to the Laboratory and then to also take information back to members of the community. What's the nature of her communication back to the community?

Member Schwartz asked how many CAC members represent themselves?

D'Ascoli said there are some people that represent very small organizations.

Member Sprintzen said we should invite her to be a member. She is a concerned citizen and I think she has something to offer.

Member Guthy said in the beginning anyone that had an interest in what was going on at the Lab was invited. Birben seems very involved in her community and I think we will all benefit from her membership.

Reed asked for a motion to invite Christine Birben to be a member of the CAC. Member Sprintzen made a motion. It was then seconded.

Member Giacomaro asked what the category will be.

Reed said she will represent Health. The CAC voted 16 in favor, none opposed, and one abstention. Christine Birben was invited to become a member of the CAC.

Member Birben thanked the CAC and joined them at the table.

## **8. 2008 Annual Peconic River Sampling Report, Skip Medeiros, Environmental Protection Division**

William (Skip) Medeiros reported on the 2008 Annual Monitoring Results for the Peconic River. He explained that there were two types of monitoring done for sediment - routine and supplemental. There are 15 stations onsite and 15 offsite that are monitored on a routine basis and if any elevated concentrations of mercury are found, supplemental monitoring, where the area is looked at more closely, is done. Mercury is the contaminant of principle concern. He explained a monitoring chart, showing the mercury levels at all the routine monitoring stations. The Record of Decision (ROD) requirement for cleanup limits are an average of <1 ppm onsite and <.75 ppm at the offsite stations. There is a 2 ppm level maximum both on and offsite for all the sediment samples. 2008 was a good year. The highest concentration of mercury was 2.1 mg/kg at PR-SS-38, which is the most upstream station. When concentrations above 2 ppm are found, 5 additional samples are taken. One at the original site of the routine sample and then one 5 feet in each direction, upstream, downstream, to the left and to the right, of the original sample. The additional samples will be taken this month.

Member Schwartz said there is always some level of uncertainty with any measurement.

Medeiros said the Lab does not report analytical uncertainties other than for radionuclides. With sediment there is more sampling error than analytical error. There is an area of about 80 square feet that will be characterized.

Member Andrejkovics asked what time of year the sample with the high reading occurred.

Medeiros replied it was in June.

Member Andrejkovics asked why it has taken a year to do the supplemental sampling. Has other sampling been done during this past year in that area?

Medeiros said no other sampling has taken place, this is a lengthy process. He explained that the data must be developed and analyzed and a report must be written and a recommendation must be prepared. The Lab has to wait for feedback from the regulatory agencies before anything further can be done. There is a protocol and it takes time.

He explained that the maximum reading of the offsite routine sediment sampling was 1.8 ppm and the overall average was .37 ppm. This year's routine sediment samples were about half the cleanup limits. Supplemental monitoring was done at PR-SS-10 because of routine monitoring results from 2006 and 2007. A total of seven transects at 50-foot distances that extended 150 feet upstream and 150 downstream from the PR-SS-10 sampling station and went across the wetlands were sampled. The extreme outermost sample point at four transects was above 2 ppm. We realized that we had not characterized the lateral extent of the contamination sufficiently. In 2008, we extended those four transects another 50 feet with the exception of the one outside the wetlands. Seven samples were collected and they ranged from .05 to .74mg/kg with an average of .26. We are confident that we have bound the lateral extent of the contamination in this area. We will continue to do routine sampling at the PR-SS-10 station.

Member Chaudhry asked why levels at the PR-SS-10 monitoring station increased from 2007 to 2008.

Medeiros said it is within the margin of spatial sampling error. There was an area of 100 square feet where mercury exceeded the 2 ppm limit.

Member Blumer asked what distance the monitoring stations are from the STP. What is the basis for where they are placed? Is this discussed in the reports?

Medeiros said the principle was to represent depositional areas in each of the cleanup areas. Cleanup goals required sampling both inside and outside the areas that were cleaned up. They correlate to areas where the river becomes wider, or dries up, or areas of extensive wetlands.

Andy Rapiejko, SCDHS, said placement was based on areas of previous sampling and cleanup, as well as known depositional areas.

Medeiros said he will check to see if there is documentation that explains in detail the area selection process.

**ACTION ITEM:** Check to see if there is documentation regarding the selection of the locations of the monitoring stations.

Medeiros said PR-SS-15 is another area where supplemental sampling was done due to elevated mercury results in 2007. He explained that this is a shallow area of the river where the

flow slows down. Samples were collected and some of the samples collected were greater than 2, so transects 150 feet upstream, downstream, to the left and to the right at 50-foot intervals were constructed. There were two locations that had values of 9.8 and 34.5 mg/kg in the transect located 50 feet upstream. Those are located 40 feet from the left hand bank (PR-SS-15-U1-L40) and 65 feet from the left hand bank (PR-SS-15-U1-L65). It was important to go back and resample those areas to find out if the results were accurate and to see how large an area they represent. The results of that sampling showed that PR-SS-15-U1-L40 had values of .06 to 19.0, with an average of 6.31 mg/kg and PR-SS-15-U1-L65 had values of 7.3 to 36.8 with an average of 20.38 mg/kg. The sample points were each marked to ensure that we were sampling the same areas. We confirmed that this is an area of elevated mercury and we feel the contamination has not left the area in the past year. BNL and DOE will initiate planning with the regulators for the remediation of the sediment with elevated mercury in the PR-SS-15 area. The area will continue to be monitored on a routine basis. The area has been sufficiently characterized with the supplemental sampling that has already been done, additional supplemental sampling is not necessary. Medeiros said it would be important to do the cleanup during times of low to no water flow, which typically happens in the fall because we would want to minimize the potential for downstream transport and we want to be able to operate within the area without the equipment getting mired down. He said he will get back to the CAC after getting feedback from the regulators regarding cleanup of this area.

Member Chaudhry asked if the goal is to get the levels below 2 mg/kg.

Medeiros said that is what he expects, but won't know until after meeting with the regulators. The maximum of 2 ppm was used in the 2004-2005 cleanup.

Member Garber asked if the areas of high concentration were near the shore, because if part of the river dries up, pollutants are concentrated near the perimeter.

Medeiros said they are in a shallow area that was probably not cleaned up previously.

Medeiros explained that for surface water contamination, there is a general decreasing trend from the area near the Sewage Treatment Plant, including the outfall, which drops off as you go downstream. One station that is 200 feet upstream of the STP has a concentration of 25 ng/L. That area was sampled for the first time this year because it was a stagnant area. There are two locations with high concentrations, one is 876 ng/L or ppt and the other is 374 ng/L. Each of those locations had high total suspended solids concentrations. These two samples were taken in shallow water about 1 foot in depth. In 2006, the concentration in that area was 1360 ng/L with the highest total suspended solids (TSS) that has been seen so far. Part of the water column sampling this year will include sediment sampling in that area to determine if there is locally elevated mercury concentrations in the sediment. This is the first time PR-WC-03 had an elevated concentration. We will watch it and if it becomes markedly elevated again, we will follow the same procedure. This was a high TSS sample. One of the potential explanations is that there is elevated mercury in the sediment in that area and as part of the collection process during a water sampling event the suspended sediment was collected along with the water. It doesn't take a lot of sediment to increase the levels. The water flow measurements that were taken in that area at that time did not indicate that water velocity was high enough to suspend the sediment by itself. We don't have the explanation. Just being in the area to collect a sample has the potential to suspend sediment.

Member Martin asked how deep the water is in that area.

Medeiros said about 1 foot. We can't collect samples in less than 1 foot of water. He then explained the results of methylmercury testing. He said one location that is 200 feet upstream of the STP, in a depressed area, had a concentration of 10.9. The concentrations of methyl-

mercury coming out of the STP are very low. There is a slight increase as the site boundary is approached. There are several parameters that are measured that have affiliations with increasing the concentrations in the water column. Among them are dropping pH, nutrients, and things that fuel biological metabolism. If those increase it is likely that there will be an increase in methylation. Those did not increase but a surrogate did. We also analyze for chlorophyll A, which is the pigment that exists in plants. That increased substantially, it went from non-detect near the STP to a high of 300. Samples are collected during the daytime and it is possible that the nutrients were tied up in phytoplankton. The concentrations decrease as you go downstream. For reference purposes, we collected a sample from the Connetquot River and we are approaching those limits. A potential explanation of the decrease in concentrations of both mercury and methylmercury as you go downstream is dilution.

Member Talbot asked why the effluent from the STP is higher coming out than it is going in.

Medeiros explained that the concentrations in the sand filter beds contribute to the elevated levels. Water column samples were collected 15 feet upstream and 15 feet downstream of that area in PR-SS-15-U1 with the elevated concentrations. The first round of sampling does not show that area to be contributing to the mercury in the water column. We will be continuing that sampling four times a year for the next couple of years or until clean-up occurs. At PR-WC-06 with the 876 value for mercury we will be collecting a sediment sample this month and later in the summer to determine the concentration in the sediment that could be contributing to what is in the water column.

Member Schwartz asked if the re-sampling will take place this fall or next.

Medeiros said he does not expect it to happen this fall.

Reed asked the CAC if they would like to postpone the rest of the presentation due to the lateness of the evening. The CAC agreed.

A decision was made to continue the presentation with the results of the fish sampling when the CAC meets in September.

The meeting adjourned at 9:34 p.m.

| Agenda Topics  | Votes |
|--|-------|
| Global Warming, Stony Brook, Pine Barrens (1-10-08)          | 15    |
| CAC as a conduit/resource to the community (11-08-07)        | 13    |
| Emergency Operations Center tour and drill (6-12-08)         | 12    |
| Nano technology (Colvin presentation 5-14-09)                | 11    |
| CERN—problems and implications (4-10-08)                     | 11    |
| Site Environment Report—good and bad (11-8-07)(10-2-08)      | 11    |
| Nano safety (3-13-08)  | 10    |
| Regulator presentations on areas they oversee                | 10    |
| Energy   | 9     |
| Overview of programs   | 9     |
| Deer Management (4-10-08)                                    | 8     |
| Anti-terrorism update  | 7     |
| NSLS-II briefing (12/11/08)                                  | 7     |
| Nuclear power plant safety                                   | 6     |
| Education Programs (10-2-08)                                 | 6     |
| Energy efficiencies (9-13-07)                                | 6     |
| Sustainable transportation                                   | 4     |
| Natural Resources management (11-13-08)                      | 4     |
| Nano ES & H (10-11-07)                                       | 3     |
| Safety and Security  | 3     |
| Experimental Review Process                                  | 3     |
| Latest RHIC findings   | 2     |
| How the Lab supports nuclear facilities in the N/E region    | 2     |
| Status of P-2 road show                                      | 2     |
| Heating plant and efficiency research (12-11-08)             | 2     |
| Lyme Disease (6-11-09)                                       | 2     |
| CAC process  | 2     |
| Alternative fuels  | 2     |
| Update on phyto/bacterial contamination remediation research | 1     |
| Deforestation  | 0     |
| Work planning process  | 0     |

#### New Topics Added After September 2007 Vote

~~Global warming—BNL research (5-8-08)~~  
~~Nano toxicology (5-14-09)~~  
~~Nano ES&H issues at BNL and beyond (5-8-08)~~  
 Nanotechnology/science at BNL  
~~Nano management policy issues (5-14-09)~~  
 Nano panel discussion with the DOE, EPA, and FDA  
 Renewable energy research at the Lab  
 BNL/CSHarbor/Stony Brook collaboration

| <b>P = Present</b> | <b>2009</b> | <b>Affiliation</b>  |           | First Name | Last Name    | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec |
|--------------------|-------------|---|-----------|------------|--------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
|                    |             | ABCO (Garber added on 4/10/02)  | Member    | Don        | Garber       | P   | P   | P   | P   | P   | P    |      |     |     |     |     |     |
|                    |             | ABCO  | Alternate |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Brookhaven Retired Employees Association  | Member    | Graham     | Campbell     | P   | P   | P   | P   | P   | P    |      |     |     |     |     |     |
|                    |             | Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)                                   | Alternate | Arnie      | Peskin       | P   |     |     |     | P   |      |      |     |     |     |     |     |
|                    |             |   |           |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | CHEC (Community Health & Environment Coalition (added 10/04)  | Member    | Sarah      | Anker        |     |     |     |     |     | P    |      |     |     |     |     |     |
|                    |             | (added 12/08)   | Alternate | Robert     | Andrejkovics | P   |     | P   | P   |     |      |      |     |     |     |     |     |
|                    |             | Citizens Campaign for the Environment   | Member    | Adrienne   | Esposito     | P   | P   | P   | P   |     |      |      |     |     |     |     |     |
|                    |             | Citizens Campaign for the Environment (Ottney added 4/02-takenoff 1/05 Mahoney put on)(7/06 add Kasey Jacobs)(K. Jacobs off 1/08) | Alternate |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | E. Yaphank Civic Association  | Member    | Michael    | Giacomaro    |     |     | P   | P   | P   | P    |      |     |     |     |     |     |
|                    |             | E. Yaphank Civic Association (J. Minasi new alternate as of 3/99) (M. Triber 11/05) (Munson 6/06) (Feinman 2/09)                  | Alternate | Bob        | Feinman      |     | P   | P   |     | P   | P    |      |     |     |     |     |     |
|                    |             | Educator (changed 7/2006)   | Member    | Adam       | Martin       |     |     |     |     |     | P    |      |     |     |     |     |     |
|                    |             | Educator (B. Martin - 9/01)   | Alternate | Bruce      | Martin       |     |     |     |     | P   |      |      |     |     |     |     |     |
|                    |             | Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02) (changed 7/2006)(Bush 5/09)                   | Alternate | Greg       | Bush         |     |     |     |     | P   | P    |      |     |     |     |     |     |
|                    |             |   |           |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Fire Rescue and Emergency Services  | Member    | Joe        | Williams     |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Fire Rescue and Emergency Services  | Alternate | Don        | Lynch        | P   | P   | P   |     |     |      |      |     |     |     |     |     |
|                    |             | Fire Rescue and Emergency Services  | Alternate | James      | McLoughlin   |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)  | Member    | Ed         | Kaplan       |     | P   | P   |     |     |      |      |     |     |     |     |     |
|                    |             | Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(Schwartz added 11/18/02)   | Alternate | Steve      | Schwartz     | P   |     |     | P   | P   | P    |      |     |     |     |     |     |
|                    |             | Health Care   | Member    | Jane       | Corrarino    |     |     | P   | P   |     |      |      |     |     |     |     |     |
|                    |             | Health Care   | Alternate |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Health Care (added 6/09)  | Member    | Christine  | Birben       |     |     |     |     |     | P    |      |     |     |     |     |     |
|                    |             | Health Care   | Alternate |            |              |     |     |     |     |     |      |      |     |     |     |     |     |
|                    |             | Huntington Breast Cancer Coalition  | Member    | Mary Joan  | Shea         | P   | P   | P   | P   | P   |      |      |     |     |     |     |     |
|                    |             | Huntington Breast Cancer Coalition  | Alternate | Scott      | Carlin       |     |     | P   |     |     |      |      |     |     |     |     |     |

| <b>P = Present</b> | <b>2009</b> | <b>Affiliation</b>   |           | <b>First Name</b> | <b>Last Name</b> | <b>Jan</b> | <b>Feb</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> |
|--------------------|-------------|--|-----------|-------------------|------------------|------------|------------|------------|------------|------------------------|-------------|-------------|------------|------------|------------|------------|------------|
|                    |             | Intl. Brotherhood of Electrical Workers/Local 2230 (S.Krsnak replaced M. Walker 1/11/07)                 | Member    | Scott             | Krsnak           | P          |            | P          |            |                        |             |             |            |            |            |            |            |
|                    |             | IBEW/Local 2230  | Alternate | Philip            | Pizzo            |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | L.I. Pine Barrens Society  | Member    | Richard           | Amper            | P          |            |            | P          |                        | P           |             |            |            |            |            |            |
|                    |             | L.I. Pine Barrens Society (added P. Loris 6/05)(Alayeva off 6/08) (Itriyeva 02/09) (Motschenbacher 6/09) | Alternate | Beth              | IMotschenbacher  |            | P          | P          |            |                        | P           |             |            |            |            |            |            |
|                    |             | L.I. Pine Barrens Society  | Alternate | Susie             | Husted           |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | L.I. Progressive Coalition   | Member    | David             | Sprintzen        | P          | P          |            | P          | (P - On speaker phone) | P           |             |            |            |            |            |            |
|                    |             | L.I. Progressive Coalition   | Alternate | None              | None             |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Lake Panamoka Civic Association (Biss as of 4/02)  | Member    | Rita              | Biss             | P          |            | P          |            | P                      |             |             |            |            |            |            |            |
|                    |             | Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99)                                     | Alternate | Joe               | Gibbons          |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Long Island Association (Groneman replace 10/05)   | Member    |                   |                  |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Long Island Association  | Alternate | William           | Evanzia          |            |            |            | P          |                        |             |             |            |            |            |            |            |
|                    |             | Longwood Alliance  | Member    | Tom               | Talbot           | P          | P          |            |            | P                      | P           |             |            |            |            |            |            |
|                    |             | Longwood Alliance  | Alternate | Kevin             | Crowley          |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Longwood Central School Dist. (switched 11/02)(Castro replaced Henigin 6/09)                             | Member    | Maria             | Castro           |            |            | P          |            | P                      | P           |             |            |            |            |            |            |
|                    |             | Longwood Central School Dist.  | Alternate | Allan             | Gerstenlauer     |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | NEAR   | Member    | Jean              | Mannhaupt        | P          |            |            |            | P                      |             |             |            |            |            |            |            |
|                    |             | NEAR (prospect taken off ¾) (Blumer added 10/04)   | Alternate | Karen             | Blumer           |            |            | P          |            | P                      | P           |             |            |            |            |            |            |
|                    |             | NSLS User  | Member    | Jean              | Jordan-Sweet     | P          | P          | P          | P          | P                      |             |             |            |            |            |            |            |
|                    |             | NSLS User  | Alternate | Peter             | Stephens         |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Peconic River Sportsman's Club (added 4/8/04)  | Member    | John              | Hall             | P          |            |            |            |                        | P           |             |            |            |            |            |            |
|                    |             | Peconic River Sportsman's Club   | Alternate | Jeff              | Schneider        |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Ridge Civic Association  | Member    | Pat               | Henagan          |            |            | P          |            |                        | P           |             |            |            |            |            |            |
|                    |             | Science & Technology (added 1/13/05)   | Member    | Iqbal             | Chaudhry         |            | P          | P          | P          | P                      | P           |             |            |            |            |            |            |
|                    |             | Town of Brookhaven (Graves made member 6/06)   | Member    | Anthony           | Graves           | P          | P          | P          | P          |                        |             |             |            |            |            |            |            |
|                    |             | Town of Brookhaven   | Alternate | None              | None             |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Town of Brookhaven, Senior Citizens  | Member    | James             | Heil             | P          | P          | P          | P          |                        | P           |             |            |            |            |            |            |
|                    |             | Town of Brookhaven, Senior Citizens (open slot as of 4/99)   | Alternate | None              | None             |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Town of Riverhead  | Member    | Robert            | Conklin          |            |            |            |            |                        | P           |             |            |            |            |            |            |
|                    |             | Town of Riverhead (K. Skinner alternate as of 4/99)  | Alternate | Kim               | Skinner          |            |            |            |            |                        |             |             |            |            |            |            |            |
|                    |             | Wading River Civic Association   | Member    | Helga             | Guthy            |            | P          | P          | P          |                        | P           |             |            |            |            |            |            |
|                    |             | Wading River Civic Association   | Alternate | Sid               | Bail             |            |            |            |            |                        |             |             |            |            |            |            |            |