# Community Advisory Council March 11, 2004 Action Items/Notes



These notes are in the following order:

- 1. Attendance
- 2. Correspondence and handouts
- 3. Administrative Items
- 4. Safety at BNL, Jim Tarpinian, Environment, Safety, Health, & Quality
- 5. Environmental Report, George Goode, Environment & Waste Management Services
- 6. Review of P2 Brochure and Update
- 7. Community Comment
- 8. Potential Members
- 9. Update on Natural Resources
- 10. Agenda Setting

### 1. Attendance

### Members/Alternates Present:

See Attached Sheets.

## Others Present:

S. Anker, G. Bartunek, M. Bebon, D. Bennett, P. Bond, H. Carrano, A. Carsten, J. Carter, J. D'Ascoli, K. Geiger, T. Green, W. Gunther, S. Hoey, M. Holland, S. Johnson, E. Lessard, M. Lynch, A. McNerney, D. Paquette, A. Rapiejko, E. Rehbein, S. Robbins, J. Tarpinian, K. White

### 2. Correspondence and Handouts

Items one through three were mailed with a cover letter dated March 5, 2004. Items four through seven were placed in the folders and item eight was available at the meeting as a handout.

- 1. Draft agenda for March
- 2. Action Item No. 04-02
- 3. Copies of letters from Dr. Chaudhari to Michael Holland re CAC consensus statements
- 4. Action Items 04-03 and 04-04
- 5. Copy of a P2 article from the EPA FedFacs bulletin
- 6. Presentation on Occupational Safety and Health by Jim Tarpinian
- 7. Presentation on Natural Resource Management by Tim Green
- 8. Environmental Update presentation by George Goode

### 3. Administrative

The meeting began at 6:38 p.m. Reed welcomed everyone and went over the ground rules and the draft agenda. Those present introduced themselves. Member Sprintzen mentioned the Long Island Progressive Coalition 25<sup>th</sup> Anniversary Celebration on March 27. Dr. Chaudhari told the CAC about the NSLS II Workshop on Monday, March 15 and invited them to attend. The workshop is at Berkner Hall and begins at 8:30 a.m. Congressman Tim Bishop, 1<sup>st</sup> Congressional Dist. and Congressman Sherwood Boehlert, Dist. 24 are scheduled to speak at the workshop. Pat Dehmer, Director of the Office of the Basic Energy Sciences, which is the Department of Energy office that will fund the upgrade, is scheduled to open the workshop. Others lecturing include Prof. Roderick MacKinnon, a recent winner of the Nobel Prize. Dr. Chaudhari said the Light Source would be the world's best source when it is completed in six to

seven years. Dr. Chaudhari also discussed the Department of Homeland Security's (DHS) decision to allow the nine national laboratories to decide for themselves how they wanted to participate in the allocation of Homeland Security work. Originally, DHS had proposed a two-tier system that would have eliminated Brookhaven from competing for classified internal contracts. There was concern that having to compete with private firms and academic institutions for external contracts would reduce the amount of work performed here. Now, each lab will make their own decision on the type of contracts they want to compete for. Dr Chaudhari said he thought this was important for Brookhaven given our proximity to New York City. Brookhaven has unique technical strengths and it is important to know what is going on inside DHS so that the Lab can help safeguard the City.

Mannhaupt: Commended the Lab for aggressively going after decisions that will be of benefit in the long run and expressed support for being involved in what's going on. She voiced support for contracts dealing with security and prevention, she did not support anything that had to do with harboring strategic response initiatives such as preventative weapons.

Chaudhari: DHS is primarily focused on protecting the homeland. Everything is geared toward trying to prevent something from getting into this country, but if it does happen, we need to know where it happened, how to respond to it, and how to avoid panic.

Giacomaro: Will the Light Source be inactive during the improvements?

Chaudhari: The current facility will function until the new building is ready and then there will be a transition. He offered to have Steve Dierker make a presentation about the upgrade to the CAC. Reed put it on as a future agenda item.

Garber: Will there be a need to change the level of security clearance at the Lab because of the DHS work?

Chaudhari: There are some people already with SCI clearance and they are checking to see if that is sufficient.

### Core Team Update

Michael Holland, Manager of the Department of Energy Area Office, gave the CAC updates on the progress of the Core Team and the Risk-Based End State (RBES) document. The formal comment from the CAC on the RBES went to Headquarters. Headquarters is incorporating their comments and Holland expects to see it returned to Brookhaven in April or early May. He reiterated that it would not supercede CERCLA. It is a stand-alone document.

Holland reminded the CAC that the Core Team was made up of the DOE, NYSDEC, and EPA. While Suffolk County Department of Health Services is not a signatory to the IAG, they are very actively involved in the negotiations. Although Holland could not provide details, he assured the CAC the meetings have been very productive.

Conklin: What happened with the BGRR and Peconic River Working Groups; why aren't they meeting? He said that he's belonged to the Peconic River Working Group since 1996. They haven't met since the End State process started and he feels that he isn't as well informed as he was. He'd like to see the Working Group meetings reinstated.

Holland: We need to get back to the working groups and provide them with information as to what has been going on with the Core Team and to get input from the group.

**ACTION ITEM:** Provide update on status of the Working Groups (Mike Bebon).

Esposito: Reminded Mr. Holland that the CAC didn't recognize the End State document.\* She also questioned why there were no results this month on the Peconic River. She said that the mercury samples were taken in November and this seems like a long time to wait for the results. Holland did not have an answer and said that no one was available tonight to provide an update. \*Note: The LIA abstained from the January 8, 2004 consensus recommendation pending further review of the End State document.

Walker: Also said that he was surprised that it will be another month before there is any information on the sampling. Reed asked who from the Lab would be responsible for getting the information.

**ACTION ITEM:** Mike Bebon is to get information on Peconic River sampling for April meeting.

Mannhaupt: Did the Core Team process delay the CERCLA process at all?

Holland: No, he felt it helps to move it along because the decision-makers sit down at the table to work issues out.

Conklin: Asked about one of the recommendations listed under Action Item 04-02, which was sent to the CAC in their packets. The Action Item was a copy of the recommendations that the CAC had made on OU III in 1999. Conklin read the item and said there were a number of discussions in 1999 about how the in-well air-stripping would be done. He said there was concern at the time about what the breakdown of the volatile organic compounds was and what the impact was when they were released into the air. He thought that part of the recommendation was that these systems be fitted with carbon filters when possible. He'd like to update the recommendation to reflect that.

D'Ascoli: The recommendations were included because they had been referenced recently and she wanted the CAC to know what had been recommended. She said the Laboratory can bring in someone from the groundwater group to respond to Bob's questions. Conklin thought that some clarification that the CAC is not saying just air-strippers, but air-strippers with certain modifications which make them more environmentally compatible, was in order.

Reed: Suggested that the CAC needed to get an update on the process and then consider updating the 1999 recommendation. The CAC agreed to put it on the agenda for April.

Mannhaupt: Could Mike Bebon talk to Les Hill to find out if the county wanted other things done? If that's true, she'd like to know the rationale for it and how the data from November and the new data is being compared. Reed said that would all come under the heading of Peconic River Offsite Sampling November and Follow-on.

Esposito expressed frustration that no information was available after canceling last month's meeting and that no one was available to explain why.

# Update on OUV contract

Michael Bebon updated the CAC on the awarding of the contract for the OU V cleanup. The contract went to Envirocon, the contractor that ranked the highest this time as well as the first time. Environcon is in the process of getting their employees trained, they are talking with the DEC on the equivalency permit for the work in the river, and ensuring that their plan and the procedures they intend to use are satisfactory. The Lab expects that work will begin within a week of securing the permit, which should happen by the end of March or early in April.

Graves: Is there any mechanism for input to the DEC on the equivalency permit?

Bebon: He was not familiar with the process, he said it may be appropriate to put in a call to DEC if anyone wants to have input into it.

Heil: Asked what the cost difference was between the first bid and the re-bid.

Bebon: The reason they rebid the contract was the change in the required prevailing wage. Based on the Lab's estimate of the amount of labor to be used on the job, the increase appears to be that difference, approximately five percent on the overall contract. He did not know the exact figure but thought the contract was for about \$6.1 million.

A quorum (14 or more) were present, therefore, the notes from the January meeting were approved. There were two abstentions.

# 4. Occupational Safety and Health, Jim Tarpinian, Assistant Laboratory Director, Environment, Safety, Health, and Quality.

Jim Tarpinian introduced himself and shared some information about his background with the CAC. He has a Masters Degree in Radiological Sciences and almost 25 years of experience managing Occupational Safety and Health. He is a certified health physicist and began his career at Three Mile Island Unit 2 after the accident. He worked for Bechtel at Hanford for the past nine years. Tarpinian described the Director's Safety Council and its vision, which is to try to achieve an injury-free work place. He talked about his philosophy on safety, accident trends, and challenges. He described safety improvement initiatives that focused on four areas: leadership, employee involvement, awareness and communication, and feedback and monitoring.

Tarpinian also explained OHSA's 18001 standard; the Lab will be working to obtain certification during the next several months. The requirements for the standard include having an Occupational Safety and Health policy, implementing and operating systems properly, and monitoring them. Hazards and risks must be eliminated or minimized through analysis, performance must be continually improved, and there must be employee involvement and a commitment from management. It will enable the Lab to have an independent third-party evaluation. The plan is for four BNL organizations to serve as pilots with more organizations participating next year.

An update was also given on the OSHA review that was conducted last fall. Currently DOE is self-regulating, in 2002 Congress directed DOE to prepare for external regulation of the non-weapons Science Laboratories by OSHA and the NRC. Inspections were performed for the purpose of developing a basis for a cost estimate of what it would take for each of the Labs to meet the OSHA standards. BNL was the seventh Lab inspected, 28 inspectors were onsite for 17 days. There were 474 buildings inspected (100%). There were 5500 findings. Tarpinian noted that the other labs had roughly the same number of citations per building. He said that most of BNL's findings were electrical and described some of the violations.

All the items were entered into a database to facilitate cost estimating and correction. The Departments and Divisions began immediately to correct the quick fix items. Approximately \$70,000 was spent during the assessment and about 200 items were corrected. Plant Engineering began cost estimates for the capital improvements. The Lab has received about \$800,000 from DOE to begin fixing the deficiencies. The final report was received last week. The cost estimate must be produced and then reviewed by the local office within four weeks. There are a number of items that will require significant cost to implement, they will be prioritized and will be completed as resources become available. Tarpinian said that one of the lessons learned from the review is that the Lab's compliance-based inspections in workspaces need to be improved.

Mannhaupt: How does the certification, if achieved, affect the contractors? Will health and safety plans be required from them?

Tarpinian: Currently all of the contractors have the same safety standards as the Lab and their contracts now contain previsions to work to Integrated Safety Management processes and they have to demonstrate that they can do that. As the Lab gets better, Tarpinian said the Lab's contractors will get better.

Mannhaupt: Urged the Lab to make its contractors and bid awardees part of the process.

Garber: Could monthly fluctuations be seen in the accident rate?

Tarpinain: The monthly average is looked at as a predictive indicator. Any statistical significance to it becomes clearer later on. The Lab also uses a rolling 12-month average. That helps indicate trends. The quarterly averages predict what happens to the 12-month average.

Guthy: What are the serious findings that required the \$800,000 expenditure?

Tarpinian: There are a number of older overhead cranes that were built to outdated standards and to bring them up to date will be expensive. Moving electrical panels and changing entrances and exits to buildings can be costly too.

Shea: Was there an incident that occurred that prompted Congress to order the regulation change and what was the most significant finding during the inspection that needed to be corrected?

Tarpinian: OSHA does not have enforcement authority over DOE facilities, and there are some that feel that they should. Tarpinian did not think there was an event that caused it to happen, but there are some people that have the sentiment. There were five situations that were considered immediate danger, a worker was standing on the top rung of a four foot step ladder, there was an air conditioner in a very small room where the floor had rotted and sagged (the inspectors felt if someone entered the room it was an imminent hazard), there was a panel open that needed to be closed up, there was a two prong refrigerator with a puddle of water in front of it.

Shea: Were there any radiological hazards?

Tarpinian: There were no significant findings. Steve Hoey (from the Lab) said there were two questionable postings where something should have been posted and wasn't and one radiological waste receptacle incorrectly placed.

Martin: What role did the contractors onsite play in the Lab safety record and the 18001 qualifications and procedures that have been put in place to comply with OSHA regulations; are they part of the Lab or treated separately?

Tarpinian: They are very much part of the Lab. The Lab tries to select safe contractors, and there are criteria for evaluating them. He said there are also contract flow down provisions that require contractors to adhere to certain safety standards. Michael Bebon added that insurance companies oversee each contractor doing business in the industrial sector. Each contractor has a lost experience modifier established by the insurance industry. They watch it very carefully and the Lab uses it in selecting contractors. There is mandatory training for each employee that is brought on to the site regarding the specific and unique environmental safety and health issues that they will encounter in their work. Bebon said in addition there are construction inspectors that go out to each job every day to look at how the contractor is performing to the technical specifications of the contract and there are people who go out to look at environmental, safety, and health compliance. Every contractor is required to file an

Environmental Safety and Health plan with the Lab that explains how they are going to administer their job from compliance to the environmental safety and health regulations that are in their contract. At the completion of the job the contractor has a performance appraisal done on them. It is kept in the file, so if they bid again, it is available for reference.

Geary: Is the OSHA review available to the public?

Tarpinian: It is just a database, but certainly the cost estimate would be available. He also said OHSA was here to do an evaluation to help with the cost estimate and that was its objective. It wasn't like any other OSHA inspection.

Walker: Does tying a supervisor's performance evaluation to safety give them an incentive to keep the numbers down artificially what are the definitions of OSHA recordable injuries and non OSHA recordable injuries?

Tarpinian: It isn't the numbers that are being looked at, it's the things they do to try to keep the numbers the same. An OSHA recordable injury is defined as an employee going to the Occupational Clinic and requiring more than first aide. If a doctor's visit or the administration of prescription medicine is required, then it's OSHA recordable meaning it has to be recorded in the logbook that is kept for OSHA. The results are sent in at the end of the year.

Giacomaro: What about Hanford's cleanup program; why are they accepting waste from the rest of the country if they are supposed to be cleaned up?

Tarpinian: The Hanford site has two missions. One is cleaning up the site and the other is a waste disposal mission and that's an institutional decision that was made for how they are going to treat the plateau area.

Sprintzen: What is the significance of the numbers 14001 and 18001?

Tarpinain: The standards committee assigns the numbers.

Mannhaupt: Environmental safety and health inspectors go out **every** day?

Bebon: They go out every day that the contractor is onsite. The safety inspections are done by Plant Engineering and they may draw on one of the Occupational Safety, Health and Quality people for subject matter expertise. There is a daily report that is filled out and that documentation is included in the performance evaluation for the contractor.

Shea: If there is a conflict between OSHA and the NRC, how would it get resolved?

Tarpinian: They have different jurisdictional areas that don't over lap.

### 5. Environmental Report, George Goode, Manager, Environment & Waste Management

George Goode introduced himself and said that he would be updating the CAC on groundwater quality at the Brookhaven Linear Isotope Production Facility (BLIP). He talked about the history of the facility, past actions, recent monitoring results, potential contributing causes, and the path forward.

BLIP operations began in 1972, it produces medical isotopes for heart function tests and for PET scans for cancer diagnosis. Tritium was detected in a monitoring well in 1998. The investigation determined that BLIP was the source. The response was to re-direct roof downspouts to discharge away from the building, install a concrete cap, seal existing pavement, and install new monitoring wells closer to the facility. Tritium levels fell below drinking water standards (DWS) in 1999 and early 2000.

During that time an activated soil region around the target area was declared an Area of Concern. Part of the remedy was to install a silica barrier to retard movement of water through that area in June of 2000. Following the injection of the material the numbers spiked back up in October of 2000. The regulators and the public were notified, sampling was increased, and a panel was convened to determine the root cause of the spike. The panel concluded it was the silica grout that displaced trapped water, driving it out. It entered the aquifer and was picked up in the monitoring wells. The conclusion was that it was likely to be a one-time event. Concentrations returned to low levels.

Goode said that the levels began to rise again about a year ago. Sodium-22 has also been detected. Tritium and Sodium-22 are indicative of activation products when found together. The Groundwater Contingency Plan, which is a consistent process followed when there are unexpected results from a monitoring well, was implemented. A technical team was formed, regulatory agencies were informed, and monitoring frequency has been increased. Overtime a maximum concentration of 42,900 pCi/L was reached. Most recent results show that the level has dropped back below DWS. The plume has been identified. It is centrally located onsite, very narrow - about ten feet wide, and it drops below DWS about 150 feet down gradient of the facility. It has no impact on drinking water.

Goode said that the technical team looked at possible contributing causes. They looked at the engineered controls and how they performed. They looked at sources of water infiltration, evaluated the role of fluctuations in the water table, and looked at potential upgradient sources. The first possible cause that could not be ruled out was the stability of the silica grout. Goode said the question was asked if the radiation in the area could be breaking down the grout and cause it to become less stable. There was a study at Lawrence Berkley National Laboratory that showed no affect of radiation on the grout. The experts involved in the design and installation of the material do not believe that stability in-situ is an issue. While this cause may warrant some additional research, Goode said the real reason it was ruled out was because this is a secondary control.

The second possible cause is storm water run-off from surrounding areas. The Booster is another facility that is capped nearby and there is a lot of water being shed from its caps. There is the possibility that if water is being shed upgradient of BLIP, and if there's a confining unit there that is allowing the water to travel along it and get under the BLIP cap, that could be a contributing cause. There are plans to install additional caps in the region, which are not related to the problem but will eliminate this as an issue for BLIP.

Fluctuations in the water table could also not be ruled out as a possible cause. The increase in the tritium concentrations may be linked to the seasonal rise in the water table. Goode said they believe this is the most likely scenario.

A technical team was formed, using the consistent approach as outlined in the Groundwater Contingency Plan, to follow up immediately on early detection of changes in tritium levels. He said that it was a complex issue. The caps and infiltration controls are working, the contamination is unrelated to the current operations of the facility, and it is not a threat to drinking water on or offsite. The most likely cause is the fluctuation of the water table. The amount of tritium is expected to diminish as the process works itself out. The Lab will continue to address potential sources, monitor frequently, proceed with the installation of the new cap, and study the possible consequences of grout instability.

Biss: Does one well always show the higher reading; are the samples taken at a particular depth, and was it changing at depth?

Goode: Typically it is one well, but not always. The plume does move slightly. The well is screened across the water table and a stop is put in the well so that the sample can be taken

right from the surface of the water table. The Lab hasn't done any vertical profiles. Doug Paquette (from BNL) said none have been done since the original investigation where the tritium was found right at the water table. He said they found a similar pattern at the HFBR and the g-2 area. With tritium, the highest concentrations are found at shallow depths when very close to the source.

Esposito: This was exactly what happened at g-2 where the soil became contaminated and the cap was installed and the CAC was assured there wouldn't be any leakage but the water table came up. And now the same thing is happening here.

Goode: He wasn't sure what the timing of that was. This cap may have preceded that. Paquette said the cap is the primary control here too and they are seeing the same pattern between tritium concentrations and water table fluctuation.

Esposito: She did not agree with Goode's summary statement about the Groundwater Protection Program. She said it's not working. The cap prevents rainwater infiltration yes, so half of the battle has been won but it just doesn't work. You've prevented rainwater, so that effect has been mitigated, but obviously the best way would have been to get rid of the tritium to prevent all this future testing and rigorous activity that is needed now. Esposito took issue with that because she doesn't think it's appropriate to say.

Goode: He understood her point. It's a difficult choice to go in with a dramatic excavation that would essentially shut the facility down and be very disruptive since the contamination is directly beneath the facility in the activated soil underneath the cap. Removal of that material would essentially mean the facility would have to come down.

Esposito: How much soil is contaminated? I thought it was localized...

Goode: That's the groundwater contamination plume. Goode showed the unsaturated zone on the presentation slide and said prior to installation there was activation occurring that was flushed out by infiltration so there is an unsaturated area that contains residual contamination.

Reed added the difficulty might be getting to the contamination.

Conklin: Has the movement that initially created the situation ceased?

Goode: Yes.

Sprintzen: Were there continually significant increases in the tritium; does the water rising actually serve to flush it out so that when the table goes down and comes back up there is less tritium there?

Goode: That's what we think will happen.

Sprintzen: If that's the case and there aren't significant increases in the amounts from the operation of the facility...

Goode: There's no more hydraulic pressure moving things through here. If the water table rises and then falls seasonally we should see natural....

Sprintzen: Instead of getting to the soil to take it out, in some sense you're flushing it out this way and over time it will dissipate.

Goode: It's not something that we're doing actively.

Giacomaro: Where is the recharge basin that's used to let the tritiated water degrade naturally in relation to the BLIP? He suggested it could be used here also.

Goode: It wasn't close and the concentrations from BLIP are so low that by the time they would reach the site boundary there will be nothing there.

Martin: Is there a lag time between the rise of groundwater and the detection of the contamination in the wells?

Goode: The wells are very close to the facility. Paquette said that taking into account that it enters the groundwater table and then takes time to travel downstream to where it is intercepted by the well, it's probably about 60 days.

Jordon-Sweet: Have any horizontal core samples had been taken?

Paquette: As part of the engineering evaluation, a small geoprobe was put in. They drilled through the floor of the facility and collected core samples down in the zone of activation and they were able to map out the strength of the radioactivity in the ground. This was done in the 1999 time frame.

Mannhaupt: Why weren't soil borings again taken to see what's happening since the silica was installed.

Paquette: The idea about the injection around the soil grains was to try to lock up that material to keep it tight so that if the primary controls, surface water controls, failed and water was able to get down there, water would not be able to leach any of that radioactivity out. With the continued operation of the facility, that zone continues to build up some radioactivity and it's designed as soil shielding material. The grout has to be kept tight.

Mannhaupt: So the presumption is the grout takes care of it by shielding.

Goode: The soil is really the shielding. The real concern is keeping water out of it.

Heil: Does the Lab sample for any other isotopes?

Paquette: The Lab does a range. They look for tritium and (cannot decipher tape)....analysis which looks for other isotopes and we do see sodium-22. When tritium and sodium-22 are together it's a good indicator of activated soil material that leached from the accelerator facility. There are a whole host of other radionuclides that are produced in the soils but they don't leach out in soils very easily. The sodium-22 doesn't leach out as easily as tritium so it's not seen a lot, and the concentrations that are seen in groundwater are below the drinking water standard.

Heil: Does the sodium follow the same path as tritium with the ups and downs?

Paquette: Yes, because it moves slightly slower than tritium, and a lag time is seen in the concentration trends. A small spike tritium is seen and then later a small spike is seen in Sodium-22.

Geary: Does the radioactivity stay in the soil? What impact will the rise in the water table and global warming have on it?

Goode: There is a fluctuation, not a constant increase. The Lab has about 50 years of data and it's at about the highest point it's been now. Paquette said that was one of the reasons for having the monitoring program. If something like that ever did happen the Lab would keep tracking and trending it and there would be impacts for other areas at the Lab as well.

Jordan-Sweet: Are there plans to upgrade the facility?

Bill Gunther (Lab employee): There was a proposal put together a few years ago for a new Cyclotron Isotope Research Center that would be totally independent of the Linac and allow the Lab to operate year round to produce radioisotopes. Right now the Lab is very much dependent on the operation of the collider-accelerator. The radiopharmaceuticals can only be produced when the beam is running, which is only nine weeks out of the year. There have been several proposals, but they haven't been funded yet.

Mannhaupt: She disagreed that the Groundwater Protection Program isn't working. The Groundwater Contingency Plan and the Groundwater Monitoring Plan are all encompassed into the Groundwater Protection Program and five years ago this information would not have been seen nor would the Lab or the departments have dealt with it. She remembered when the program was rolled out years ago, and acknowledged all the work Paquette did on it.

Biss: Is 49 feet the highest you've seen the water table? Based on what she's seen at Lake Panamoka, the water table has not changed that much.

# 6. P2 Update, George Goode

Goode reported that the agenda had been formulated and a brochure will be produced next week. He mentioned some of the outside agencies that will be participating and asked CAC members to help distribute the brochure and promote the workshop with their contacts. He also asked for the CAC to designate a member to participate in the welcome activities. It was determined that Jim Heil will represent the CAC. A signup sheet was sent around for members who will help distribute the brochures.

## 7. Community Comment

There were no comments from the audience.

### 8. Potential Members

Reed said that the CAC's process for accepting new members is to hear from a potential candidate about their background, why they'd like to serve, and why it would be beneficial for them to do so. Their application is evaluated and a super-majority decision is made. That process is being started tonight for two individuals.

John Hall, Vice President of the Peconic River Sportsmen's Club was the first candidate. The Sportsmen's Club has 500 acres of property with the Peconic River going through it. They are located on River Road in Manorville. There are 600 members in the club and two families live fulltime on the property. Hall said they were the first club in the US to receive an award from the Environmental Protection Agency. (The U.S. Environmental Protection Agency gave the Peconic River Sportsmen's Club a Certificate of Recognition for the club's environmental stewardship plan which formally adopted EPA-recommended best management practices for lead at an outdoor shooting range.) He also has been a member of the Peconic River Working Group for three and a half years.

Member Biss asked about the lead in the bullets. Hall said they watch the ph on the property and pick up the bullets and the lead is recycled. Member Garber expressed support for Mr. Hall as they are stakeholders and do consume some of the fish from the river. Member Giacomaro asked what Mr. Hall's expectations were. Hall said he felt they should be represented because the Lab affects them. Member Mannhaupt asked if he would be the designee to the CAC and why they decided to apply now. Hall said he had asked about the CAC in the past but didn't realize he could apply.

Member Sprintzen emphasized the importance of attending meetings and urged Mr. Hall that if he is accepted, he should plan to attend meetings regularly.

The second candidate asking to be considered is Sarah Anker. She said that she had been at an Environmental Roundtable and met Mary Joan Shea who told her about the CAC meetings. She's been with the Mt. Sinai Civic Association for seven years and has worked with Lori Baldassare. Ms. Anker said she started a breast cancer coalition called Community Health and Environment Coalition (CHEC). It was originally a committee of the Civic Association but they've become more involved and are working directly with the Department of Health to expedite the investigation that's being done on the breast cancer clusters in their area through the mapping project. She said that she is also participating on Congressman Bishop's Breast Cancer Advisory Council and has been in touch with Senator LaValle regarding his task force. She was asked to serve on the board of ABCO and co-hosts a show with Dick Amper.

Member Sprintzen asked if she would be representing herself or an organization. She said she would represent her organization, CHEC. They are located in Mt. Sinai and their prime objective right now is to work with the Dept. of Health on breast cancer clusters.

Reed asked her why it would be important to be a part of the CAC. She said she came to a roundtable about two months ago about the Peconic cleanup. She found it really fascinating, and had many questions. Brookhaven is one of the sites on the inventory for the Department of Health. She wants to learn more about it.

Member Jordan-Sweet asked about openings under the health category and if Minna Barrett was still a member. Jeanne D'Ascoli said Minna would like to participate but since 9/11 has been focusing on other things.

Member Giacomarco asked if the organization was involved in issues other than breast cancer. Anker said they are concerned about storm-water runoff.

Member Schwartz asked about the organization, its officers, how long it has been in existence, and how many members it has. Anker said the group started as a committee with the Mt. Sinai Civic Association when the cancer maps came out in September of 2000. They met at her house and did a letter campaign and they decided to get more involved environmentally with other issues. The Civic wanted to concentrate on zoning and community projects, so they broke away. The group is still fairly informal but is doing a lot of proactive work. She said there are four board members that sign letters and there are 22 people that are part of the coalition. She has an email list of 160 contacts.

Member Shea said that she thought it would be good have some younger members on the CAC.

Member Martin asked about the geographic area the group covers. Anker said she is focused mainly within Mt. Sinai but networks with others.

Member Mannhaupt asked if she was correct in understanding that the group started with breast cancer and is now expanding into environmental issues, areas of the overall environmental health problems dealing with things on all of Long Island. She said the CAC's focus is reviewing the CERCLA process and cleanup mitigation. Anker said her group is both health and environment. Right now they are focused on the breast cancer maps, the Department of Health is doing an investigation and they don't want them to stop. They are focused on health and its relationship to the environment.

Member Sprinzten said that he would not be at the April meeting, but wanted to offer support for both Mr. Hall and Ms. Anker. He said that the CAC should take the steps to remove Minna as she had not attended in over a year.

The CAC agreed to further discuss membership and take up consideration of the new members at their April meeting.

### 10. Natural Resource Update, Tim Green, Environmental Services Division

Tim Green, Cultural and Natural Resource Manager, gave an overview of the Laboratory's Natural Resource Plan and programs. Green said that the Natural Resource Plan was completed in December of 2003. It was developed with input from the Technical Advisory Group (TAG) and replaces the Wildlife Management Plan, which was more narrowly focused.

Green said that highlights of the plan include use of the Geographic Information System and Global Positioning Systems to manage species and vegetation, and for habitat identification, protection, and enhancement. Monitoring and surveys have been conducted of migratory birds, deer populations, and Tiger Salamanders. The Lab is also monitoring deer and wild turkey populations.

Green said that one of the things started last summer with the undergraduate students was to begin to look at some of the other species on Long Island and at the Laboratory to try to identify where they are, what species are present, and what habitat's they're utilizing because "Unless you know what you have, how are you going to manage it."

Green talked about the bird surveys explaining that survey maps were developed covering the habitats on site. They go out once a month from April until the end of September and stand for 5 minutes and count every species of bird that is heard and how many times they hear it. Between 72 and 79 species have been identified annually, and over the four years a total of 103 species have been identified on site.

Green also talked about deer. Deer management is a regional issue. The population across Long Island is increasing. The Lab's population is estimated to be 1,400 but is in decline right now because of winter. There is concern that over time some native plant species could be lost because of deer overpopulation and shortages of food sources. Green explained how the deer surveys are conducted. Specific routes on site are checked and the population is estimated from the number of deer sighted. He said there was a 50% decline during the 2000/2001 winter, however, it only took two years for the population to rebound. Recently an aerial infrared survey was done. Wertheim National Wildlife Refuge, the Rocky Point Wildlife Management Area, and BNL were surveyed to compare areas where the population is managed by hunting and areas where there is no management.

Green talked about fire management, wetlands and river management, invasive species, education, and outreach. He briefly discussed several research projects and noted that Brookhaven was featured in several segments of Newsday's "Long Island, Our Natural World" series. He also described partnerships with the U.S. Fish and Wildlife Service and the NYSDEC banding Canada Geese and trapping wild turkeys to transfer them to areas on the South Fork.

Member Martin said the information was fascinating and asked if there was an overview on the BNL web page. Green said that he was in the process of writing last year's annual report. Once that is written and goes through the Technical Advisory Group, it will be turned into a pdf file and placed on the website.

Martin also asked about the impacts of development around the Lab on the deer population at the Lab and about deer ticks. Green said that Suffolk County has the highest or second highest incidence of Lyme Disease which means there are a lot of deer ticks and there is some correlation with the number of deer. Deer usually stay in about a one square mile range, but young males will travel three or four miles.

Garber suggested that the CAC would be an appropriate forum to get involved in active control of deer and wondered if there might be a consensus on the topic. Green reiterated deer management is a regional issue and said an active management program at the Lab wouldn't be much of a benefit if the surrounding areas did not also have active management.

Member Shea asked if the Lab has been monitoring birds for more than four years and if there was a noticeable effect from the West Nile virus. Green said there has been no detectible effect.

Shea: No increase in dead birds?

Green: There were two or three dead birds that were transferred to Suffolk County but most of the activity has been around the Lab, not on site.

Shea: Where are the turkeys being released and does the Lab monitor frogs?

Green: The turkeys went to the Grace Estate in East Hampton. As for the frogs, the Lab has participated in frog call surveys in the past. One of the last articles in the Newsday series was on the Spade Foot Toad. The Lab documented a massive reproductive effort last May where thousands of toads appeared after being absent for four years.

Geary: How is the deer population controlled? She expressed a concern about loss of habitat due to overdevelopment.

Green: The answer is complicated. Although people have moved into their habitat, the deer have also moved into developed areas. They are surviving on landscaping plants that are actually quite nutritious. Several control methods have been looked at, contraception doesn't work in an open population because all the deer have to be treated, plus it is cost prohibitive. The two methods that tend to work are controlled hunts and culling. He added that it is necessary to have a hunting program in place after the culling operation to keep the population in check.

Schwartz: He thought the presentation and programs are superb. He suggested getting Scouts involved in some of the projects and asked about the use of predators to control the deer.

Green: The natural predators of deer would be mountain lions and black bear. The Lab has done a couple of projects with Eagle Scouts.

Mannhaupt: Commented that the deer issue was very emotional but thought that some brainstorming should be done to explore it.

Green: Once the cultural carrying capacity is reached people will begin to call for control. He also said that the DEC understood that it was a regional issue.

# 11. Agenda Setting

### April Agenda

OU V
NSLS II Upgrade
Environmental Update
P2 Conference
Membership

The meeting adjourned at 10:27 p.m.

| 2004 Affiliation  |           | First Name | Last Name  | JAN | FEB        | MAR | APR | MAY | JUN | JUL | AUG | SEP | ост | NOV | DEC  |
|---|-----------|------------|------------|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Chart Key X = Present O = Absent  |           |            |            |     | No<br>Mtg. |     |     |     |     |     |     |     |     |     |  |
| Share No. 7 Trooms & Albooms  |           |            |            |     | ivitg.     |     |     |     |     |     |     |     |     |     |  |
| ABCO (Garber added on 4/10/02)  | Member    | Don        | Garber     | Х   |            | Х   |     |     |     |     |     |     |     |     |  |
|   |           |            |            |     |            |     |     |     |     |     |     |     |     |     |  |
| ABCO  | Alternate | Richard    | Johannesen | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Brookhaven Retired Employees Association  | Member    | Graham     | Campbell   | 0   |            | 0   |     |     |     |     |     |     |     |     | igwdown  |
| Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)           | Alternate | Lou        | Jacobson   | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Citizens Campaign for the Environment   | Member    | Adrienne   | Esposito   | Х   |            | Х   |     |     |     |     |     |     |     |     |  |
|   |           |            |            |     |            |     |     |     |     |     |     |     |     |     |  |
| Citizens Campaign for the Environment (Ottney added 4/02)                                 |           | Jessica    | Ottney     | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| E. Yaphank Civic Association  | Member    | Michael    | Giacomaro  | Х   |            | Х   |     |     |     |     |     |     |     |     | <del>                                     </del> |
| E. Yaphank Civic Association (J. Minasi new alternate as of 3/99)                         | Alternate | Jerry      | Minasi     | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Educator  | Member    | Audrey     | Capozzi    | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Educator (began as alternate in 3/99) (A. Martin new                                      |           | _          |            |     |            |     |     |     |     |     |     |     |     |     |  |
| alternate 2/00) (Adam to college 8/01)(Bruce 9/01)  | Alternate | Bruce      | Martin     | 0   |            | Х   |     |     |     |     |     |     |     |     |  |
| Educator  | Alternate | Adam       | Martin     | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Environmental Economic Roundtable (Berger resigned,Proios became member 1/01)             | Member    | George     | Proios     | Х   |            | 0   |     |     |     |     |     |     |     |     |  |
| Environmental Economic Roundtable (3/99, L. Snead changed to be alternate for EDF)        | Alternate | None       | None       |     |            |     |     |     |     |     |     |     |     |     |  |
| Fire Rescue and Emergency Services  | Member    | David      | Fischler   | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Fire Rescue and Emergency Services  | Alternate | James      | McLoughlin | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)                          | Member    | Ed         | Kaplan     | Х   |            | 0   |     |     |     |     |     |     |     |     |  |
| Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(schwartz added 11/18/02) | Alternate | Steve      | Schwartz   | 0   |            | Х   |     |     |     |     |     |     |     |     |  |
| Health Care   | Member    | Jane       | Corrarino  | Х   |            | 0   |     |     |     |     |     |     |     |     |  |
| Health Care (as of 10/02 per JD)  | Alternate | Mina       | Barrett    | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| Huntington Breast Cancer Coalition  | Member    | Mary Joan  | Shea       | Х   |            | Х   |     |     |     |     |     |     |     |     |  |
| Huntington Breast Cancer Coalition  | Alternate | Scott      | Carlin     | Х   |            | 0   |     |     |     |     |     |     |     |     |  |
| Intl. Brotherhood of Electrical Workers/Local 2230  | Member    | Mark       | Walker     | Х   |            | Х   |     |     |     |     |     |     |     |     |  |
| IBEW/Local 2230   | Alternate | Philip     | Pizzo      | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| L.I. Pine Barrens Society   | Member    | Richard    | Amper      | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| L.I. Pine Barrens Society   | Alternate | Katherine  | Timmins    | 0   |            | 0   |     |     |     |     |     |     |     |     |  |
| •   | Alternate | Jane       | Geary      | Х   |            | Х   |     |     |     |     |     |     |     |     |  |

| 2004 Affiliation   |           | First Name | Last Name        | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | ост | NOV | DEC |
|--|-----------|------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L.I. Progressive Coalition   | Member    | David      | Sprintzen        | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| L.I. Progressive Coalition   | Alternate | None       | None             |     |     |     |     |     |     |     |     |     |     |     |     |
| Lake Panamoka Civic Association (Biss as of 4/02)                    | Member    | Rita       | Biss             | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99) | Alternate | Joe        | Gibbons          | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Long Island Association  | Member    | Matthew    | Groneman         | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Long Island Association  | Alternate | William    | Evanzia          | Х   |     | 0   |     |     |     |     |     |     |     |     |     |
| Longwood Alliance  | Member    | Tom        | Talbot           | Х   |     | 0   |     |     |     |     |     |     |     |     |     |
| Longwood Alliance  | Alternate | Kevin      | Crowley          | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Longwood Central School Dist. (switched 11/02)                       | Member    | Barbara    | Henigin          | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Longwood Central School Dist.  | Alternate | Candee     | Swenson          | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| NEAR   | Member    | Jean       | Mannhaupt        | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| NEAR   | Alternate | Wayne      | Prospect         | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| NSLS User  | Member    | Jean       | Jordan-<br>Sweet | х   |     | х   |     |     |     |     |     |     |     |     |     |
| NSLS User  | Alternate | Peter      | Stephens         | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| PACE Union   | Member    | Allen      | Jones            | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| PACE Union   | Alternate | Philip     | Plunkett         | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Ridge Civic Association  | Member    | Ron        | Clipperton       | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Ridge Civic Association  | Alternate | None       | None             |     |     |     |     |     |     |     |     |     |     |     |     |
| Town of Brookhaven   | Member    | Jeffrey    | Kassner          | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Town of Brookhaven   | Alternate | Anthony    | Graves           | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Town of Brookhaven, Senior Citizens                                  | Member    | James      | Heil             | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Town of Brookhaven, Senior Citizens (open slot as of 4/99)           | Alternate | None       | None             |     |     |     |     |     |     |     |     |     |     |     |     |
| Town of Riverhead  | Member    | Robert     | Conklin          | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Town of Riverhead (K. Skinner alternate as of 4/99)                  | Alternate | Kim        | Skinner          | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Wading River Civic Association                                       | Member    | Helga      | Guthy            | Х   |     | Х   |     |     |     |     |     |     |     |     |     |
| Wading River Civic Association                                       | Alternate | Sid        | Bail             | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Yaphank Taxpayers & Civic Association                                | Member    | Nanette    | Essel            | 0   |     | 0   |     |     |     |     |     |     |     |     |     |
| Yaphank Taxpayers & Civic Association                                | Alternate | None       | None             |     |     |     |     |     |     |     |     |     |     |     |     |