

These notes are in the following order:

1. Attendance
2. Correspondence and handouts
3. Administrative Items
4. CAC Finalization of the ATSDR Public Health Assessment Comments
5. Community Comment
6. BNL Educational Programs & Open Space Stewardship
7. Agenda Setting

1. Attendance

Members/Alternates Present:
See Attached Sheets.

Others Present:

N. Blackburn, M. Bebon, P. Bond, J. Carter, P. Chaudhari, J. Clodius, H. Carrano, F. Crescenzo, J. D'Ascoli, K. Geiger, T. Green, R. James, S. Johnson, M. Lynch, A. McNerney, G. Penny, A. Radiejko, K. White

2. Correspondence and Handouts

Items one through six were mailed with a cover letter dated January 6, 2006.

1. Draft agenda for January 12, 2006
2. Draft notes for December 8, 2005
3. Final notes for November 10, 2005

3. Administrative

The meeting began at 6:32 p.m. Reed Hodgkin went over the ground rules and the draft agenda. Those present introduced themselves.

Reed asked the members to go over the December notes.

Member Kaplan asked if people quoted in the minutes had a chance to review their quotes.

Member Shea said she made comments about the Breast Cancer Study and about the ATSDR that were omitted and she was surprised because she was the only one present that represented the health community part of the CAC and so much of the health section was devoted to breast cancer so it was obviously very important to the ATSDR health study. She said the discussion of breast cancer on Long Island is quite prominent in the study and she would like to have her comments included in the minutes. The comments that she made were about the Long Island Breast Cancer Study Project not being a comprehensive study. That's what the review leads one to believe and therefore they found no adverse effects and so there are no environmental effects on Long Island due to exposures from BNL. She also said that

one of the major points was that exposure to ionizing radiation was not part of the study and that is the only known scientifically established cause of breast cancer. Radiation exposure is a complete carcinogen. It can initiate and promote cancer without any other co-factor.

Jeanne D'Ascoli said we'd be happy to do that. What we tried to do was to incorporate all of the comments into the list of comments that are attached and that went on to Adrienne, Jean, and George for inclusion as the comments from the CAC.

Member Shea: I think this was separate. This was during the regular part of the meeting and I'd like it included in the regular meeting as well.

D'Ascoli: Many people also made comments that were not included in the notes. We didn't single you out.

Member Shea: But I think specifically because I addressed the health community I just felt that I was very surprised that my comments were not included.

Reed asked if she wanted to review the notes before they go out again.

Member Shea: Yes.

Member Esposito said that Mary Joan's comments were captured in the comments that will be discussed later tonight.

Member Conklin asked for a clarification: Maybe Andy could help me a little bit with this. I had a question at the last meeting about who this report was actually written for. I talked to Sy Robbins and Amy Yuchatz after the meeting, and they felt that the major thrust for this report was the scientific community. It should be highly detailed, much better done to a greater extent because it was actually supposed to be used, and Jean's not here tonight to verify this, but it was supposed to be used by the regulators as one of their key items of work. So it wasn't written just, from what I can find out, for the general public, which I thought was true. Now is there anybody here who has a different take on this?

Reed asked if he needed the comment changed or if he was bringing some additional information to the meeting from his discussion?

Member Conklin: I find a problem with the report if that's true.

Reed: So we'll leave the minutes as they are right now. But you have a topic you want to bring to the table when we start our discussions.

Member Conklin: Alright.

Reed asked for any additions, deletions, or changes to the minutes? He asked for a motion on the notes. Motion was made and seconded and he asked for any further discussion.

Member Shea: I have to object until that part is included in the minutes.

Reed: So you want to leave them in draft form until

Member Shea: Why don't we go over it again next time to approve them after I've approved of the draft.

Reed asked if the CAC was okay with doing that?

Member Kaplan said that he wanted to clarify why he asked his earlier question: We have several employees here who are in the Masters program that I described to you several meetings ago and several of them are going to be going over our minutes from day one to try to get an idea of the kinds of things that are discussed back and forth on the issues and it occurred to me that very often in our notes we get comments from people who don't sit around the table. And I just hope that we can have the notes, the minutes as accurate as possible so that whatever the students, whatever conclusions they draw, they're based on correct statements.

Reed asked if there were any other administrative comments before we get into the content of the evening?

Member Sprintzen asked about the present status of the budget.

Dr. Chaudhari said that he was having an All Hands meeting on the budget and invited the CAC to attend. The meeting is at 10 o'clock tomorrow (January 13, 2006) at Berkner Hall.

4. Updates

Michael Bebon said that there are quite a few projects going on. He highlighted the Research Support Bldg. and the Center for Functional Nanomaterials. The Research Support Building, is a \$13 million construction project. It's designed to co-locate administrative groups across the Laboratory that service the scientific user community. It has functions in it like HR so when a person comes to the Laboratory and they visit that building they can get checked in. The Credit Union will be there so that they can set up their banking and the badging office will be there, so they can get their badge.

The building is about 35% complete. The structural steel has been erected. They're starting to put the roofing on. The next phase that will be beginning later this week will be the installation of the prefabricated metal panels that will form the enclosure of the building, the exterior walls. The building design is two large rectangular buildings that are connected by a structural glass transition lobby so as you look at the building you won't see any wall in the middle.

It is designed to be a green building. We are hoping for and anticipate getting LEAD certification for the building for sustainable design features that have been designed into the building. It's interesting that one of the aspects of that is one develops a building on a site and one of the requirements for LEAD certification is to preserve acreage equal to or greater than the footprint of the building. And we've done that. We're pretty excited about that.

The building is on track and it's on schedule. The exterior walls are running a little behind, but the interior work is a head of schedule. There's mechanical and electrical utility work going on inside so on balance, they are right where they should be. It will be fully enclosed and look completed from the outside by May and we hope to begin moving people in by October of 06. The project will not be fully complete until April of 07 because after we move the people in from a lot of the old wooden buildings that they're occupying right now the project includes money to demolish and clear the sites of those buildings.

The facility that you may not have seen is the Center for Functional Nanomaterials (CFN), which is a little further drive down Brookhaven Avenue. It's diagonally across from the existing NSLS building. It's a \$34 million building. It will be a lab housing our activities in nanoscience. That building is a little behind the Research Support Building. It started a little bit later, so it's not as far along. But they are also on schedule. The foundation has been poured, and they're ready for structural steel. The steel should be delivered and will begin to be put up next week.

The CFN also has a rather unique architectural design. By its function it needs to have very high ceilings, it needs to have extremely tight temperature controls, plus or minus one degree

and in some areas plus or minus a tenth of a degree. So it's a very sophisticated building in terms of the heating, ventilation, and air conditioning systems and the temperature controls. That building will actually have a whole phase of commissioning. There'll be a lot of testing and so on. We're very excited about both buildings. They are reinvigorating our sense of the infrastructure that we have. One interesting thing is the same contractor won both bids. It's a good Long Island firm.

Member Graves asked about the cost of the building that may be LEAD certified versus one that would not have been (inaudible)...

Bebon said he didn't know if that had been looked at, it adds some initial cost. If you look at a life cycle cost it actually saves money because renewable components that have a longer life are built in versus things that wear out that have to be replaced. You're building in energy conservation, and since you're doing it from the initial design phase some times there's no additional cost. One of the only significant cost elements, not a big one, that's kind of interesting is in a LEADS building more showers are put in. The logic behind that is that people are being encouraged to bike to work, to walk, and to exercise. So there are more shower requirements in the code. It's very interesting, there are a minimum of 26 incremental design features above what would sort of be normal for a building that are the threshold of LEADS and 32 or 34 were built in. The way LEADS works is you don't know until you finish the building whether you're certified or not. You don't get it until it's actually completed so everyone builds in more so that if they don't get credit for one or two you're still there.

Member Sprintzen asked who the contractor was and if they were Union or not.

Bebon said it is E. W. Howell and indicated that they are a Union contractor.

Member Garber asked if the CFN was going for LEADS certification.

Bebon said they are hoping to get Silver certification, while the Research Support Building is working toward Bronze.

Member Giacomaro asked when the Nano Center would be completed.

Bebon thought it was the end of 07.

Member Kaplan asked if an EIS was going to be, or if one had been done, for the CFN?

Bebon said that both buildings went through the federal National Environmental Policy Act process. The buildings are reviewed to determine if an environmental assessment or environmental impact statement is needed. Both of the reviews indicated by the nature of the projects, as both were developed in areas of the site that had been developed before and certain other environmental aspects, that they fell into what is called a categorical exclusion. There was a NEPA process run on them, but they met the threshold.

Member Kaplan said that he was not so much interested in building the Center, but if it's potentially using materials that some people might be concerned about.

Reed said something about a programmatic EIS as opposed to a facility (inaudible)

Bebon says he doesn't know the answer to that. He wasn't involved directly with the EIS process for that building so he doesn't know.

Member Kaplan asked if that could be found out (inaudible, too low)

ACTION ITEM: Get answer to Ed Kaplan's question.

Unidentified speaker: You mentioned something about the Research Building replacing old buildings that will be torn down. Since the Nano Center is new, are there any old buildings associated with it that will be torn down?

Bebon said not for that building. There are some buildings that people will move out of, but the buildings won't be totally empty. What will likely happen is that a sort of second order movement will take place. People who are in lesser buildings will be moved into the other buildings. After all the round robin is done, we hope to have everyone consolidated into the better space and free up something that can be demolished. Right now, there isn't a firm plan of what can be demolished when it's completed.

Member Talbot asked what the square footage was.

The Research Support Building is around 55,000 square feet. The Nano Center is 94,500.

5. CAC Finalization of ATSDR Public Health Assessment Comments

Reed said the series of comments that the CAC has worked on have been captured. At the end of the last meeting you commissioned a group of three of your members, Jean, George, and Adrienne to go off and build those comments into a consistent communication that could then be sent to the ATSDR as the comments from the CAC. The charge to that group was to take what you had already said and build it into an effective communication. That's what you have to look at this evening.

He said: The charge this evening is not to do more new evaluation of the ATSDR, you've done two sessions of that already. He recommended that the CAC avoid wordsmithing to the fullest extent they could so they could finish tonight. What you're really charged with tonight is validating that this group went off and produced an effective communication of what you had come up with. If we can stay focused on that I think we can go to closure on this pretty quickly. One of the reasons to go to closure on this pretty quickly is that you asked for an extension in order to do this. That extension goes until next week. This is your last shot at developing your comments and getting them in. It's not something that you can do another month on if you want to take the opportunity and still meet deadline. So given all that, you have some draft materials in front of you that you're just getting today to look at so I'd like to suggest that you take sometime to look at that before we start the discussion. Read over the materials quickly then I'd like to ask George and Adrienne to give us a brief overview of what they put together and why.

Member Garber asked for a point of clarification. He assumes that this will go forward and be appended to the Study but that the ATSDR will not in fact comment on any of these things, they will just at best be appended to the final file document?

Member Esposito said they are asking them not to put this in a final document.

Reed said one of the recommendations is not to issue a final document. If they follow the group's recommendation there won't be a final ATSDR report as I understand it. Unless they choose to significantly modify what they've done.

Reed explained that the documents that were distributed were from Adrienne, Jean Mannhaupt, and we received a few comments from George Proios.

Member Esposito said that she took all the comments that everyone had said over the past two months and drafted comments. She sent them to Jean and to George and asked for their input. She did not hear from Jean, but she got comments from George. So the comments are the collaboration of her work and George's. Jean's comments are all of that plus her own. Jean's is

the only one we should be looking at right now because it just has a few comments that I'm looking at and some of it is wordsmithing. Let's just work off of that so we're only working from one document and make it easy.

Member Shea said she didn't get a chance to hand her comments in but she has comments from the Long Island Breast Study that she wanted to add.

Reed asked if she would like to have them appended to the response.

She said that was fine, she'd like them to go along with the CAC document cause she was very involved with the Long Island Breast Cancer Study right from the initial meetings.

Reed: Do you want those discussed by the group? Or do you....

Member Shea: I'd like to discuss them and then I would like to have them included.

Reed: Let's first take them in order. Let's take the comments that were prepared from what we already worked on and examine those and come to a conclusion there. And then we'll let Mary Joan make a presentation on her additional comments and we'll decide how to include them in the package.

Reed suggested that they take ten minutes to read Jean's document and then the CAC could have their discussion.

Member Conklin asked if someone could give him an answer to his earlier question.

Reed: As you read this we are going to pose Bob's question. Bob asked if the intended audience for this document is the general public or the scientific community. Is it intended to provide the scientific or regulatory community a basis for making regulatory decisions? And what you heard from Amy Yuchatz is that it was not just for the general public, but....(two people talking)

Member Conklin: They only thing I want to know is that.

Reed asked if anyone had any further information they could share with Bob and the group on that.

Member Esposito asked if Amy said it's just for regulatory agencies or it's for both?

Member Conklin: Both.

Reed: It's not just for the general public. It's also for regulatory use.

Member Conklin: The regulatory people were going to use it as a guide for some of their decisions. Now if that's true, that puts it at another level.

Reed asked if anyone had any knowledge of the intent of the report and the intended audience?

There was no response from the CAC members.

Member Garber said he was confused. If there was consensus here that we do not want this put into the Administrative Record, which is what the second paragraph says then we may want to have some documentation on why we want this not to be filed. Some of these additional points would probably be very useful if this were to go into the Administrative Record but I think we can bypass a lot of conditions if we in fact decide that this report should be history and I think we can streamline this and get out of here much earlier.

Reed: If you think a sentence ought to be added that says why we don't think it should be in the Administrative Record, think of what the sentence would be.

Reed: There was a lot of content here and I don't think it should be refined. You should get your comments in because there's a lot of meat in what you've done already.

Ok, ten minutes for reading.

Reed asked for background from Adrienne and George on the comments they drafted.

Member Proios said he wanted to avoid the conflict in their next to last comment that says it appears the report was done by multiple authors, so to avoid that criticism I'll just let Adrienne do it.

Member Esposito: I took all the comments that were provided from the flip charts and captured the context of all the comments that we had developed over the past two months and I just reorganized them and put them in a more traditional comment form and then read the report again and worked to substantiate our comments with some examples. So for instance if we weren't comfortable with the drinking water section, we felt that the report deficient in areas I just went through the report and cited two or three things that substantiated why we felt it was deficient. Then I categorized them under drinking water, air emissions, Peconic River, recommendations, and conclusions. A lot of people had concerns about the simplicity and the lack of recommendations at the end. That's what I did, I just reworked them and substantiated our commentary and categorized each of our comments. Then I sent them to Jean and George to see if we left anything out and if they could be phrased better. George sent me back his comments. I incorporated them into what you have today and then you can see Jean's comments with the underlining.

Reed: We'll go into a process that I think will lead us to closure fairly rapidly. I'd like to focus on issues that you've identified in here that you think are not ones that we should bring to the ATSDR. Stay away from polishing the comments, and instead focus on things that shouldn't be said or things that needed to be said differently in order to communicate what was meant. He opened the floor to issues that needed to be addressed.

Member Guthy said that she appreciated the people that put all the work into this. She asked about information being available and using uncertified laboratory information and why that was questioned. Do you believe that information was not correct? Why wasn't it okay for them to go somewhere else if the Lab didn't have it?

Member Esposito responded that the report said it was uncertified and then when it was checked they got it different. So in one case, the one that jumps to my memory, for instance, they got a reading of 1.5 ppb of a particular VOC from an uncertified lab, but when they did a double check they got a reading of 15 ppb and the report doesn't go on to explain how they rationalized the difference for the same sample or how they dealt with that, or even if they did address it. The report itself says they don't like using uncertified labs and prefer not to, but they did.

Member Guthy asked about the recommendation that says the report did not look ahead to evaluate what needs to be done differently. Was this their charge or were they to compile information?

Member Esposito didn't remember whose comment that was, but said when you make a recommendation she thinks it's inherent in the recommendations that you look for specific things that can be done to not only remedy the situation, but also to prevent it from occurring again. That's how I would interpret recommendations and that's what we felt didn't happen here.

Member Guthy said that on the last page it says if the ATSDR did not have adequate resources it should have refused to conduct or conclude the study. Do you really think that this would not serve any purpose to anyone?

Member Esposito said these aren't just her comments. They're from everyone.

Member Guthy said she was just asking for an explanation.

Member Esposito thinks that comment captures the sentiment of the that people that said it was confusing and discombobulated that it doesn't achieve any reasonable goal at the end of the day. It doesn't have a useful purpose so why embark on something that doesn't have, even if you agree or say the conclusions are okay. To have a study that doesn't achieve a useful purpose is not worth the paper its printed on.

Member Shea: I guess one of the comments that annoys me in general is the standards that they were using for their criteria on health effects. They never mentioned the latest studies. They seem to all be pretty dated. I read through this, it took me a long time to go through the entire thing. It was very confusing. One of the most confusing things I've ever read. It seems like different people were writing different sections and they weren't checking with each other. So it was just very, very confusing but I would like to have known what standards they used because they never even mention BEIR 7 which is the very latest report on low level ionizing radiation. I went through the references and they seem to be pretty dated.

Reed: I believe there is a comment about standards in the document.

Member Esposito said she believes there is also a comment about the references not being complete.

Member Henagan asked to add one thing on. He said one of the things we have to be careful of is when we say the standards became more stringent and went from 50 to 5. Typically on a lot of EPA mandated tests, it is a limit test. They are looking at whether or not it is above or below that limit. They don't know, if they say it's below 50, they don't know whether its 40, 30, or 20. That data's not there. It just passed the test. It's a comparison test. Basically it's quite often just two tubes. If one tube is darker than the other it fails. They don't truly have a limit value, so if we go to them and say a later standard comes up and says 5 ppm, you can't look at that 50 part that passed in the past and say well does this pass the current the standard because that data does not exist. It's very difficult to take current health standards and look at these past tests in that vein of light. So it's true in some cases, but not all.

Reed: Unless we're going to make a change to the document that's a substantive change. I think we should hold the conversation on standards at this fundamental level at another time.

Reed asked Mary Joan if that met her needs on standards.

Member Shea said no. It would have to be a more generalized statement that would refer to the standards on ionizing radiation in addition to whatever recent standards there are. I think in going through the references that they were not up to date as far as I was concerned. The article comments about BEIR V and BEIR VI and BEIR VII and these standards have become more stringent as more information has come in about the affects of low level radiation. So I think it's very important to ask why they didn't use the latest document?

Reed: Ok.

Member Esposito asked if they could say changes in standards over time regarding ionizing radiation?

Member Shea: Yes, low level ionizing radiation.

(Unidentified) And that pertains to breast cancer?

Member Shea: No everything. I think we should mention BEIR VII.

Member Esposito: Some of us don't know what that is. These are collective comments.

Member Shea: Well it's easy to say what it is. It's the latest document put out by the National Academies of Science, a 700 plus page report on the risks from ionizing radiation. BEIR VII is the seventh report on the biological effects of ionizing radiation entitled "*Health Risks From Exposure to Low Levels of Ionizing Radiation.*"

Member Kaplan: In general I think what you're saying is that there is a body of information that is more current and it is not reflected by the Agency. And I think that should also go into the conclusions. That's a little bit different from the sixth bullet in the conclusions that only talks about conclusions.

Member Esposito: So that should be a separate bullet?

Member Kaplan: I would suggest another bullet. I would say that the Agency neglected to prepare for more recent information by various scientific and regulatory agencies.

(Unidentified): Look at number four where it says information is now overshadowed by events, it is overshadowed by recent reports and more thorough analyses. That's what that's about, new information and reports. So instead of saying overshadowed by events...

Member Esposito: I think what we were trying to say there was that events meant the cleanup that already happened.

Reed: Ok, unless there's a problem with this I think we've addressed what we're looking for here. Let's move on to other comments.

Member Graves: This is not polishing. The word siting on page 2, citing can be spelled a lot of different ways and its spelled wrong here. It should be spelled with a c. And in the second bullet under conclusions, should supported be unsupported?

Reed: That's a good catch.

Member Biss: The report findings all kind of stop in 1995 except that in the references they have up to 2005 for BNL reports. Did this whole study stop in 2000 or 1997 because they don't cover any of the new stuff which is part of what George was doing here making the comment. Go back to the one you changed a while ago in the conclusions, the information is overshadowed by, all the new information is missing. The report would have been useful years ago, it's now overshadowed events and they reference it. Now why in the devil did they reference it if they're not going to use it?

Member Esposito: That's one of the many mysteries of this report.

Member Garber: I think the body of the report was written much earlier and the appendices were added later.

Member Biss: But I don't think even in the appendices they went to the new data.

Reed: Is that what you want Rita, what I've got?

Member Heil: This is a soft issue. The first paragraph where Jean has indicated or added by the 1996 request, my suggestion is if that request is available it be included in these comments.

Member Esposito: I had a question about that too because if we don't know what that is, this is the first I heard that.

Member Garber: I think that was back when the CWG group (community working group) put it in, precursor to the CAC asked for this type of study. That was over eight or ten years ago.

Reed asked if it was okay to stay the way it is. Perhaps Jean has a copy of it. If somebody does, perhaps we can get it attached to this. If they don't then we can let it go without it.

Member Proios asked about the bullet that begins the health effects... and there was some confusion over which copy the CAC was working from. It was resolved that they were working from Jean Mannhaupt's copy which stated that the effects raised (except for air emissions) had been addressed and resolved in other studies...

Member Shea objected and said that she didn't believe that the health effects raised, that all of the health effects had been thoroughly addressed and resolved in other studies especially concerning breast cancer. She asked that there be a separate section in the conclusions just about breast cancer.

Someone suggests changing the health effects to some health effects.

Member Shea said that was fine.

Reed: What we have now is the health effects issues raised by the ATSDR report (except for breast cancer and air emissions) have been thoroughly addressed

Member Shea: I still think that's too strong. There are so many health effects. I've been researching this and I've come up with so much data that I can't possibly say that because they have not. I did a search just on breast cancer and the environment on Long Island and I came up with a page of ten studies that are very recent that have never been included in this, in their references. And there are studies on other health effects.

Member Esposito said she thinks the point of the comments is getting lost in the wordsmithing. I think we don't want to lose to the comment that the ATSDR report does not add value to existing studies. That was the point of the comment. It wasn't to justify what they have done. It was to say that they don't add value.

Reed: What if the sentence just read the ATSDR report does not add value to existing studies on health.

Member Esposito said that would be fine.

Member Garber wondered if it was an appropriate time to see if there was consensus on the basic document.

Reed asked if there was anyone at the table who did not support consensus on what's written.

Member Shea said she didn't because the breast cancer issue was excluded. I think if you have a bullet on breast cancer and I can say what I have to say in one of those little bullets then I could support it.

Reed asked if she wanted a bullet in the conclusions portion?

Member Shea: I could do that.

Someone points out the bullet on breast cancer on the first page.

Member Shea said it should be in the conclusions part.

A lot of people talking...

Member Esposito thought it was more powerful in the general comments but said it didn't matter to her where it was placed.

Member Shea said she missed it cause it was at the bottom of the page and if I can miss and I'm really interested in it.

Someone said repeat it.

Reed: If we repeat this comment in the conclusions, will that take care of what your need?

Member Shea: I would accept it, that's fine. The only thing I have to add is probably soil.

Reed asked air, water, and soil?

Yes.

Member Jordan-Sweet pointed to two typos – add the end quote on page two and insert the word may in the last sentence of the first paragraph on page three.

Member Shea asked to correct the name of the Long Island Breast Cancer Study Project.

Reed asked if there were any objections to consensus.

Reed next asked Member Shea to talk about her attachment to the document. He said her comments were breast cancer specific comments that she had developed and would like them attached to the CAC document.

Member Garber asked if before Mary Joan spoke, if they could thank Adrienne, George, and Jean for their work.

Member Shea: I made some comments at the last meeting about the Long Island Breast Cancer Study Project and I guess I didn't fully justify why the breast cancer community, many people that I know and have worked with, were so disappointed with the study. I've made a list of comments here and one of the things that really set me off is when I started reading about the breast cancer comments in the health review. Breast cancer, they state here on page 68 that the major concern is the high rate of breast cancer on the eastern end of Long Island and again and again throughout the document they mention that when they question the public about health effects breast cancer is one of the main issues. So I think I'll just read to you a little bit about what I wrote here.

Under "Community Health Concerns and Evaluation," ATSDR says members of the community surrounding BNL are concerned that the emissions from the Lab could result in exposures that may lead to someone developing a disease or cancer. A major concern is the high rate of breast cancer on the eastern end of Long Island. Several research projects including the Long Island Breast Cancer Study Project have been undertaken by various universities to determine what the cause or causes of the high rates are associated with. Because the concern for breast

cancer is so great ATSDR has reviewed the research and has presented the results in this health assessment. That's pretty strong. And I'll go on, these are my comments now.

The studies mentioned above, especially the L. I. Breast Cancer Study Project, are not comprehensive studies. The only known and scientifically established cause of breast cancer is exposure to ionizing radiation. Ionizing radiation is a complete carcinogen. It can initiate and promote cancer without any other promoting factor. The L.I. Breast Cancer Study chose from its initial planning stage to exclude exposures to radionuclides from the L. I. Breast Cancer Study Project. It also chose to severely limit the chemicals to be examined. As a member of the L. I. Breast Cancer Network, I was part of a group of breast cancer organizations and hospitals on L. I. that met with Dr. Gammon and other researchers involved in these studies from the initial stages. We were a small group whose members were responsible for lobbying our congressional representatives to get the funding to conduct this study. The National Cancer Institute had a regular representative assigned to our group that came to our monthly meetings to update us on progress.

During our meetings various scientists from the studies would give reports and take questions about progress in their particular studies. I was also a community representative on the EMF and Breast Cancer on Long Island Study conducted by Dr. Leske from Stony Brook University. This study and the way the activists were treated was very professional. The reasons that breast cancer activists are disappointed with the L. I. Breast Cancer Study Project is because they do not consider it a comprehensive study of environmental factors of breast cancer on Long Island. The following points will tell you exactly why.

1. In 15 or more projects selected for funding and over \$31 million spent so far, only a few dealt directly with environmental factors on Long Island which was supposed to be the focus of these studies.
2. Of those that did deal with the environmental exposures, the emphasis was on environments in and around individual homes, in other words, lifestyle factors of the individuals involved in the studies.
3. Chemicals studied were already off the market, were already banned. DDT, its metabolite DDE and Chlordane. We were concerned about chemicals that our neighbors and our children were currently exposed to on Long Island. (We already had breast cancer.)
4. We came up with a list of chemicals known or highly suspected as carcinogens in current use on Long Island. We requested that they be added to the list investigated. Even after writing to and meeting with the EPA and Dr. Gammon personally, we were turned down.
5. The decision to select the control women from the same exposed geographic area means they really had no controls. The study period was one year. If you don't have cancer in that period you may have it a year or more in the future. How can anyone make any assumptions about what does or does not cause cancer by analyzing anything about these equally exposed women in a one year period.
6. No attempt was made to address the additive and synergistic effects caused by exposures to multiple chemicals and multiple radiation emissions.
7. Only a small percentage of samples of soil and dust around the homes of 15-year residents were analyzed and they were not properly packaged. They were also not correlated with blood and urine specimens taken from the same women.
8. The data form for the soil collection asked about herbicide and pesticide use by the homeowner but no assays were indicated except for polycyclic aromatic hydrocarbons, PAHs, and their nitrated relatives, N-PAHs.

9. Some critics of these studies have estimated that only four percent of the participants will have had a full assay of both biological and environmental samples.

10. The study design, a case control study, for a one-year period is not the proper design to find out anything about long-term exposures or current exposures that may cause breast cancer. For all of the money spent, a long-term study could have been designed that followed-up on the cases into the future. It would have been more beneficial. It would have dealt with actual exposures not memories of what the women remembered as the basis for some of the data.

The National Cancer Institute states the following on their webpage about the Long Island Breast Cancer Study Project. The primary aims were to determine if organochlorine pesticides including DDT, PCBs, Dieldrin, and Chlordane, and polycyclic aromatic hydrocarbons (PAH), an ubiquitous pollutant caused by incomplete combustion of various chemicals including diesel fuel and cigarette smoke are associated with risk for breast cancer among women on Long Island. These are my comments. DDT and Chlorodane are no longer in use on Long Island.

Member Shea said that DDT and Chlordane are no longer in use on Long Island. PAHs, because they are ubiquitous are not unique to Long Island; so they tell us nothing about Long Island specifically and breast cancer.

Since the list of chemicals that were studied is so small and does not include many chemicals and radionuclides known or suspected to cause cancer and have been in use on Long Island it cannot be used to say that a comprehensive study was done and environmental exposures from BNL or other sources are not implicated in breast cancer or other health effects on Long Island. That's the gist of most of it. And the other things were listed in your list so I won't go into that. But I just wanted to set the record straight about the breast cancer study and why it doesn't apply to health effects on Long Island.

Reed said these comments that Mary Joan has just brought to us really provided a more detailed collaboration on the bullet point in the general comments. If you want to, what we can do is to say something like, if you want me to I'll craft it right here, more detailed comments regarding the inadequacy of the Long Island Breast Cancer Study Project are provided in Attachment A to these comments. Is that something that you would like to do based on what you've heard from Mary Joan?

Member Guthy said she has no objections to adding them. The one thing she didn't hear about was the genetic disposition of breast cancer. Do you have any information on that in relation to all the other things?

Member Shea said she did and explained in some detail about the genetic factors involved.

Reed: I don't want to start a discussion on the breast cancer study. What we have is a statement and the comments that you've all agreed to. The question before us right now and the only question before us is how do we include Mary Joan's additional set comments in your document. The three options before us tonight are to either include them by consensus as an attachment. To include them as an attachment and say it's been developed by one of the members as an individual attachment to the document. (tape switched, didn't pick up third option)

Member Proios said that the comments are great in addressing that study. But this gives it much more prominence than I think it should actually be getting. We only have three pages on the whole report and there's very little relating to that one particular study. It almost makes an independent reader feel that we feel that there's a major issue here that they overlooked that

they should be looking at. He was concerned that the L. I. Breast Cancer Study Project comments would overshadow the group's comments on the ATSDR report.

Member Kaplan said he agreed with George. What we're doing here is commenting on the ATSDR report. If we attach this, or something like this, why not put other attachments saying that other information was available but not used. I think we captured it. I probably wouldn't support attaching that.

Reed suggested that the CAC send their consensus recommendation in and to then sponsor Mary Joan's additional comments as a separate submittal that says the CAC is submitting these comments that have been developed by one its members concerning one of the references. That would go in as opposed to Mary Joan submitting it under Huntington Breast Cancer Action Coalition cover, that's the other option that you have. It's not part of this but the CAC is submitting it as a separate document because one of its members would like to have it submitted. That's another option that you have.

Member Garber said he liked the latter alternative, to send Mary Joan's comments in separately. My concern with some of this is while the L.I. Breast Cancer Study Project has valid criticism on the whole thing, this report is on Brookhaven Lab and I don't want to see a discussion on radiation that to casual reader would say well it's Brookhaven Lab, it's ionizing radiation that is the cause of cancers on Long Island. I think that's probably not the case and I don't think this really should give credence to that.

Member Jordan-Sweet said she agrees with George and Ed. Anyway, if anything, that should be submitted from the Huntington Breast Cancer Action Coalition and we could say for more details see the submission by the Huntington Breast Cancer Action Coalition.

Member Corrarino: One thing that we might want to consider would be to include this as an appendix because this points out some of the flaws in the report that we're discussing and while we didn't go into this kind of detail with every point it might be useful to say for example we have an appendix that points out all these flaws. You didn't include this, that and the other thing and that just proves our point. I also think this seems very important to Mary Joan and I think it has some value. I don't think that it should overwhelm the rest of the comments.

Member Shea said that she doesn't really believe that this implicates BNL as the reason for breast cancer on Long Island. It just states that this was never looked at. I would never say that and I don't think that's the way its understood but I do think it's important to let the public know because I don't know how many of you read through this whole document but I did. The emphasis on the health section and this is a health study primarily was on breast cancer. They made a big issue of it. You can vote on what you want to do with this, but I do believe we should include it because they spent so much time on it. The community health concerns section is primarily about breast cancer.

Reed said that he didn't think the CAC would reach consensus on including this as a direct attachment to their comments. I think that, if stated properly, what Jean Jordan-Sweet has come up with is probably a good way to approach it. That is to make a statement right here in the bullet that says for further details of the inadequacies of this document we refer you to the comments submitted under the cover of the Huntington Breast Cancer Action Coalition.

Member Kaplan said it doesn't work for him. He said he's listened to Mary Joan and he agrees that she is pointing out a really serious deficiency in the report. Where it was mentioned the first time at the bottom of page one, this is an example of what many of us believe is an egregious part of the way the work was done and that should be emphasized. That this is a specific example of how the report says one thing and it's not supported by the information that's available, by groups that have participated in the analysis of the problem. And so I would prefer to change the bullet in the conclusions, make it briefer, but emphasis on page one something

like an example of the inadequacy of the ATSDR's report concerns breast cancer. Then it says here the breast cancer study is misrepresented as comprehensive and complete yet many local stakeholders (see attached comments) believe otherwise. That gives emphasis to what Mary Joan is saying and gives emphasis to what we're saying.

Reed said that's very good.

Member Kaplan said on page one I would start the last bullet off saying an example of the inadequacy of the ATSDR's report concerns breast cancer and then we believe that the L. I. Breast Cancer Study is misrepresented as comprehensive and complete. Yet many local stakeholders (see whatever you put before) believe otherwise. Then in the conclusion section somehow shorten it to just say it misrepresents studies as being completed when they're not. That really captures what Mary Joan is saying, what we're all saying.

Member Shea: I think we have to leave in the section about it not addressing exposure to radionuclides.

Member Esposito suggested checking to see if all still agreed on this.

Reed asked if there was still consensus? Is there anyone that believes, with the change in wording, that we would not have consensus?

Someone suggested changing the conclusion bullet.

Reed asked if they could live with it the way it is?

They said yes.

Reed asked if there were any objections to consensus at this point.

There were no objections from the CAC.

6. Community Comment

There were no comments from the community.

7. BNL Educational Programs & Open Space Stewardship

Ken White, Manager of the Office of Educational Programs, said that education has been part of the Laboratory since its inception. He described the programs for elementary, middle school, high school, and college students. He also explained the science contests sponsored by the Lab and discussed the programs for teachers. White explained several new programs including the Hofstra Science Technology Entry Program, Global Information System Day, Biology for Middle School Teachers, and the GREEN Institute and Open Space Stewardship program.

The GREEN Institute, or Gaining Research Experience in the ENvironment, targets an audience of K-16 teachers and students. The flagship program is the Open Space Stewardship program that seeks to meet several challenges. A regional challenge of managing publicly owned lands, a school district challenge of changing expectations for performance in math and science, and a Laboratory interest in promoting science literacy and encouraging students to consider careers in science and technology. The concept is to partner school districts and teachers with land stewards who are responsible for open space in close proximity to the participating school. Parameters and research protocols will be developed depending on the ecology of the site and

the teachers and students will help monitor the property. White discussed the anticipated outcomes, program status, and the timeline.

The CAC asked numerous questions. Some of them were about funding and staff, if there would be an impact on research, who the school liaisons were, if the Scouts were involved, and about girl's interests in science.

White said he believes the funding will come from many sources collectively. Possibly from the land stewards, if the school chooses to put resources toward implementing this program over some other project, or from the towns that now are responsible for managing the land. He said the process he has described would not impact the researchers.

Member Corrarino said there are a number of barriers for girls and young women to be successful in a career in physics. I think there are layers of issues. She wondered if the Lab couldn't look more closely at some of the factors that help make girls and young women successful and perhaps come back and we could look at this more closely. It's an area that's of interest to me.

White said some literature searches could be done on that. He doesn't really have the staff to do a full-blown evaluation. There are a lot of people out there who are doing that.

8. Agenda Setting

February 06 Agenda

HFBR

BLIP & g-2

Regulators Perspective on 5-year Review

Peconic River Updates

Nano Research Issues

Science presentations on antiterrorism, plant research, dark matter, research on energy

Map on the tritium plumes (handout)

Issue of success factors related to girls and women in science

Update on funding

Breast Cancer Research

The meeting adjourned at 9:28 p.m.

2006	Affiliation		First Name	Last Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Chart Key - P = Present																
ABCO (Garber added on 4/10/02)	Member	Don	Garber	P												
ABCO	Alternate	Doug	Dittko													
Brookhaven Retired Employees Association	Member	Graham	Campbell													
Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)	Alternate	Arnie	Peskin													
CHEC (Community Health & Environment Coalition (added 10/04)	Member	Sarah	Anker	P												
	Member	Adrienne	Esposito	P												
Citizens Campaign for the Environment (Ottney added 4/02-takenoff 1/05 Mahoney put on)	Alternate	Brendan	Mahoney	P												
E. Yaphank Civic Association	Member	Michael	Giacomaro	P												
E. Yaphank Civic Association (J. Minasi new alternate as of 3/99) (M. Triber 11/05)	Alternate	Matthew	Triber													
Educator	Member	Audrey	Capozzi													
Educator (B. Martin - 9/01)	Alternate	Bruce	Martin													
Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02)	Alternate	Adam	Martin													
Environmental Economic Roundtable (Berger resigned, Proios became member 1/01)	Member	George	Proios	P												
Environmental Economic Roundtable (3/99, L. Snead changed to be alternate for EDF)	Alternate	None	None													
Fire Rescue and Emergency Services	Member	Joe	Williams													
Fire Rescue and Emergency Services	Alternate	Don	Lynch													
Fire Rescue and Emergency Services	Alternate	James	McLoughlin													
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)	Member	Ed	Kaplan	P												
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(schwartz added 11/18/02)	Alternate	Steve	Schwartz													
Health Care	Member	Jane	Corrarino	P												
Health Care (as of 10/02 per JD)	Alternate	Mina	Barrett													
Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	P												

2006	Affiliation		First Name	Last Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Huntington Breast Cancer Coalition	Alternate	Scott	Carlin												
	Intl. Brotherhood of Electrical Workers/Local 2230	Member	Mark	Walker	P											
	IBEW/Local 2230	Alternate	Philip	Pizzo												
	L.I. Pine Barrens Society	Member	Richard	Amper												
	L.I. Pine Barrens Society (added P. Loris 6/05)	Alternates	Phoebe	Loris												
	L.I. Progressive Coalition	Member	David	Sprintzen	P											
	L.I. Progressive Coalition	Alternate	None	None												
	Lake Panamoka Civic Association (Biss as of 4/02)	Member	Rita	Biss	P											
	Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99)	Alternate	Joe	Gibbons												
	Long Island Association (Groneman replace 10/05)	Member	Lauren	Hill	P											
	Long Island Association	Alternate	William	Evanzia												
	Longwood Alliance	Member	Tom	Talbot	P											
	Longwood Alliance	Alternate	Kevin	Crowley												
	Longwood Central School Dist. (switched 11/02)	Member	Barbara	Henigin	P											
	Longwood Central School Dist.	Alternate	Allan	Gerstenlauer												
	NEAR	Member	Jean	Mannhaupt												
	NEAR (prospect taken off 3/4)(blumer added 10/04)	Alternate	Karen	Blumer												
	NSLS User	Member	Jean	Jordan-Sweet	P											
	NSLS User	Alternate	Peter	Stephens												
	Peconic River Sportsmen's Club (added 4/8/04)	Member	John	Hall	P											
	Peconic River Sportsmen's Club	Alternate	Jeff	Schneider												
	Science & Technology (added 1/13/05)	Member	Iqbal	Chaudhry												
	Town of Brookhaven	Member	John	Turner												
	Town of Brookhaven	Alternate	Anthony	Graves	P											
	Town of Brookhaven, Senior Citizens	Member	James	Heil	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											
	Wading River Civic Association	Alternate	Sid	Bail												