

These notes are in the following order:

1. Attendance
2. Correspondence and handouts
3. Administrative Items
4. Community Oversight Committee Report, Andrew Rapiejko
5. Review of Peconic River Alternatives, Tom Daniels
6. CAC discussion on Its Recommendation
7. Community Comment
8. BGRR Transportation, Fred Petschauer
9. Agenda Setting

## 1. Attendance

### Members/Alternates Present:

See Attached Sheets.

### Others Present:

S. Anker, P. Bond, H. Carrano, A. Carsten, J. Carter, P. Chaudhari, J. Clodius, F. Crescenzo, T. Daniels, J. D'Ascoli, K. Geiger, G. Goode, K. Grigoletto, L. Hill, S. Johnson, A. Juchatz, T. Kneitel, S. Kumar, J. Lister, M. Lynch, A. McNerney, S. Medeiros, J. Monroe, L. Nelson, M. Parsons, J. Petry, F. Petschauer, A. Rapiejko, B. Royce, J. Tarpinian

## 2. Correspondence and Handouts

Items one through four were mailed with a cover letter dated June 4, 2004. Items five and six were placed in the folders, and item seven was available at the meeting as a handout.

1. Draft agenda for June
2. Draft notes May 13 meeting
3. Final notes March 11 meeting
4. CAC Peconic River EE/CA & Action Memo Survey
5. Revised draft June agenda
6. Copy of Peconic River Alternatives presentation
7. Copy of BGRR Presentation

## 3. Administrative

The meeting began at approximately 6:31p.m. Reed welcomed everyone and went over the ground rules (correct set of ground rules to be linked to the agenda slide for the July meeting) and the draft agenda. Those present introduced themselves.

Dr. Chaudhari asked the CAC if they would like him to share information about the science done at the Lab and the vision of the Laboratory. The CAC indicated they would. Chaudhari said he would spend five minutes at the beginning of the meetings speaking on different aspects of Laboratory science beginning with the High Energy Nuclear Physics Program. He explained the Lab is trying to understand what the Universe is made of, to be able to predict how the Universe started, how it evolved over time, and why it is what it is today. He talked about RHIC and said the experiments there are geared toward understanding the first one millionth of a second after the Universe came into existence. Chaudhari also briefly described RHIC II and eRHIC.

Jeanne D'Ascoli said Jean Mannhaupt had received word just prior to the meeting that her nephew was ill so she would not be in attendance. She asked CAC members to keep them in their thoughts. D'Ascoli said that she had requested a copy of the Executive Summary of the STAR report from Scott Cullen. He did not respond on that, but he did ask when the next CAC meeting would be. She told him July.

D'Ascoli said that she has used the CAC email distribution list a few times and asked if the members had received the messages. Member Sprintzen suggested that a read receipt be requested when a message is sent. Member Jordan-Sweet asked that people consider when replying if they want to reply just to the sender or the whole list. D'Ascoli said that if CAC members reply to the server it goes to everyone, if they want to reply just to her, her email address is [dascoli@bnl.gov](mailto:dascoli@bnl.gov).

D'Ascoli also said that there were a few changes on the agenda. She said because the CAC has often expressed interest in the opinions of third parties, she placed Andy Rapiejko on the agenda to discuss the report prepared for the Suffolk County Community Oversight Committee on the health of the Peconic River. She said that as Rapiejko had been added, the Magothy Aquifer and Strontium-90 update would be given next month. The alternatives for the BGRR would also be previewed and the discussion would be continued in August. She noted that Keith Grigoletto had scheduled a tour of the Peconic River cleanup areas for June 17, CAC members should sign up if they're interested. D'Ascoli also reported that he had given his notice and would be leaving the Lab. The CAC expressed their appreciation for his services.

As a quorum had been reached Reed asked the CAC to review the May notes. He asked if there were any additions, deletions, or corrections? Member Guthy asked about one of the Action Items. Jeanne D'Ascoli said Bob Howe would address the groundwater items next month and that Fred Petschauer would give an update on the worker in his presentation later in the evening. On the item about other accidental exposures, she hoped to have that information next month. Member Guthy asked that two typographical errors on page two be corrected. Under the membership discussion, absented (in two locations) will be corrected to abstained. The notes were approved, pending the corrections, with four abstentions.

#### **4. Community Oversight Committee Report, Andrew Rapiejko**

Suffolk County hydrogeologist Andy Rapiejko said that Amy Juchatz, a toxicologist, was in the audience to help him answer questions. In 1999, the Health Department was given three directives by the Legislature, to perform split sampling, to hire a consultant to identify possible contamination in and around the Carmans River, and to hire a consultant to perform a health and environmental assessment of the Peconic River. The Legislature also established the Community Oversight Committee. He said the first two directives were completed respectively in 2000 and 2002 and he previously reported to the CAC on them. He would report on the Peconic River assessment tonight.

Cashin Associates, P. C. was the consultant that was hired to perform the assessment. They subcontracted the risk analyses portion of the assessment to Integral Consulting, Inc. Rapiejko said that the consultant had conducted a creel survey on fish consumption, identified possible contamination sources, and collected data from BNL, USGS, SCDHS, and PEP. He reported on the contaminants identified in the river and on surface water quality. The study found ecological impacts to the ecosystem and environment. He said they did not go out in the field to gather data. Models were used. Information is entered and any potential impact is calculated. The Kingfisher was used for worse case analysis because it stays in one area and feeds on fish. An impact was seen to increased reproductive failure. Human health impacts were an increased risk due to consumption of groundwater. This was mitigated by the extension of public water to those affected. An increased risk due to the consumption of fish was also found. The risk was due to PCB's located on-site under a future scenario where no cleanup was done.

There was a non-cancer risk to children from mercury (development effects) identified. And again, the risk was higher in the future if no cleanup is done.

Rapiejko explained the contaminant fate and transport analysis. The consultant compiled the data from the Brookhaven Site Environmental Reports on the loading of some contaminants from the Sewage Treatment Plant. The analyses focused on PCBs, cesium-137, and mercury. The PCBs were found to remain on or close to the BNL site while the cesium and mercury were transported downstream.

The Suffolk County Health Department conclusion based on the study is that it affirms their position that the most thorough clean-up possible should be performed and that long-term monitoring should take place after the cleanup. Rapiejko said he felt that the results were comparable with the BNL Peconic River assessment. He said copies of the county study could be obtained by calling him on 853-2255, or visiting the Longwood or Riverhead Public Libraries.

CAC members asked why the overall risk figures were higher in the county study. Rapiejko said that different consumption numbers for fish could have been used or the data could have been screened differently. Rapiejko said the studies are comparable because they are both in the 10,000 range.

Jean Jordan-Sweet: Could you explain the hazard quotient?

Rapiejko referred the question to Amy Juchatz who explained: The hazard quotient is a way of evaluating non-carcinogenic effects. With cancer effects, we think of cancer as being any exposure can lead to some degree of risk. When you're dealing with non-carcinogens there might be an exposure below which there is no risk of developing that adverse effect. Carcinogens and non-carcinogens are handled differently. Carcinogens are quantified in this 1 x has cancer in a thousand. Where with non-carcinogens we try to extrapolate from either human or animal data to come up with a dose that we think below which there will be no chance that a toxic effect will occur. It's typically called a reference dose. It's looked at as a threshold. The exposure is looked at and the dose is predicted that someone will receive of a certain chemical from a certain pathway. That is compared to the reference dose. If it's lower, it's less than one. If it's higher, then it would be above one. As it gets higher above one, the higher it goes the more likely there will be an effect in a population exposed. That's done for each chemical.

Mary Joan Shea: What about the difference between adults and children?

Juchatz: In the BNL and county risk assessment the exposures to both children and adults was looked at. Children can be more susceptible for their exposure. Specific exposures that might be unique to children and increase the dose they might receive is looked at and the reference dose is based on the most critical effect that can be found.

Schwartz: For some perspective, what would be the number of cancers that might be expected in a population of 10,000 against which the three could be compared? How many people in the population are exposed in the Peconic River watershed that could be compared to the 10,000?

Juchatz: I don't really have a good answer for that except to say that the estimates, I don't know what the general risks of getting any kind of cancer in the general population is, whatever it is, this is an added increase to the risk. Whatever the baseline is, this is additional to that.

*Member Garber said that he had been trying to calculate in his head how many Peconic River fish have to be consumed to produce one additional cancer risk. And what I think I saw there, you have say one in 10,000 for instance. And it looks like for the average fish there is like a meal a month so it's like 12 fish a year. So that comes out to I think about 120,000 Peconic River fish have to be consumed to produce one of these excess...???*

*Esposito: How did you get 120,000?*

*Garber: 12 per year times 10,000. One in ten thousand....*

*Esposito: I thought it was one person.*

*Garber: One person would be very, very obese. If those numbers are ball park, you know where I'm going on this.*

*Rapiejko: The numbers that I put up, how many fish meals you should eat were for mercury concentrations. Mercury concentrations are not a cancer risk. The cancer risk came from the VCE's. Mercury risk was in the hazard quotient.*

*Garber: Probably a good thing to do would be to try to relate any of these health hazards to how many fish have to be consumed and then really relate that to the fishery.*

*Rapiejko: Earlier Amy said the mercury risk was for a developing fetus. So if you think about how long is a fetus, it's 9 months or so. So a pregnant woman only consumes fish for that nine month period, you don't have to consume it for 20 years to have a risk.....*

*Garber: If you consume one can of tuna fish it is not 100% certainty that you will get a developmental problem. It's a small percentage and this reflects back in the total fish meal of the Peconic fishery. If this keeps up we're going to have Japanese trawlers going up the Peconic River.*

*Rapiejko: The whole idea of risk assessment came out of the CERCLA process. It's related to .....?? It's not trying to calculate how many fish you can eat before you're going to have kidney failure. So trying to apply this .....(hard to understand) ...give some kind of idea of risks at Superfund sites. There's a lot of uncertainties that go into this on both sides.*

*Campbell: It seems like it's a question of internal consistency in the analysis. I think there's a very big question, these analyses are not very precise, are not very well understood even. There are questions that pop up that show the scale of things is just grossly wrong. The question of how much fish has to be eaten to cause problems has been part of the Peconic River discussions for months. And I don't think that this analysis has done anything to resolve the issues.*

*Reed reminded the CAC that they've had discussions on how to do a risk assessment and on how much fish consumption occurs. He said that if the CAC goes back to those discussions nothing else on the agenda will get accomplished.*

*Juchatz said that a pregnant woman would have to eat one fish-meal a month for nine months to cause developmental effects on the fetus.*

*Guthy: If you have fish in one month, does it add up in the nine months? Doesn't it pass through your body?*

*Juchatz: The level will decline if you're not exposed again. It doesn't stay in your body forever.*

*Guthy: So some of it will be gone?*

*Juchatz: Some of it would be, but you have to look at what the input is and what the output is. As the dose gets higher, more will remain between the meals. As the concentration goes up it's less meals.*

Biss: Why are the future numbers so much higher?

Rapiejko: The future was on-site. It was assumed that the Lab no longer existed and people could live onsite and eat the fish on the property.

Hall: How far east would you recommend going? Four years ago I never heard of anything east of Moriches Road, now we're east of Manor Road.

Daniels: The extent of the cleanup goes about a third of the way to the Sportsmen's Club.

Rapiejko: The levels that were sampled after that and in Donohue's Pond are showing mercury levels approaching background.

Hall: Jeff Schneider is the lake chairman and this is the first year that we are taking sampling of sediment, water, and fish and splitting them with BNL. Our samples are going to our own lab. The samples are on target with the results BNL is getting.

Esposito: Read from the study - *The risk is mainly for children, but exposed adults also face increased risk well above background levels in all areas of the river. Cashin Associates fish consumption survey found that some people catch large numbers of fish from the river and eat more than 15 meals a year of such fish. Although the highest risks were associated with consumption in the upper reaches of the river, risks were elevated further downstream in the river as a whole.* To me it's saying there's increased risk, there's cancer, and as we discussed, non-cancerous risks and it's not eating 120,000 fish over your life span. It's more immediate than that. This is another basis, in addition to BNL's health study, of why a comprehensive cleanup needs to occur.

## **5. Review of Peconic River Alternatives, Tom Daniels**

Tom Daniels handed out copies of the Peconic River fact sheet. Daniels said that last Friday Area A onsite had been completed. The sediment has been removed and transported to the drying area. They are significantly through Area B. Progress is good. The first round of confirmatory sampling has been done in Area A. The cleanup goal is less than 1.00 ppm. Out of 26 samples, the highest is 0.28 ppm. The average is less than .1 ppm.

Daniels described the four cleanup alternatives. Alternative Four has changed significantly from the last time it was presented. It targets areas offsite near Schultz Road and Wading River Manor Road where methyl mercury was being methylized and getting into the water column and fish.

Daniels also talked about restoration. The river will be broken into sections for monitoring. The sections will be checked every two weeks for two growing seasons and any invasive species will be removed.

Garber asked about the benthic community and the type of fill to be used. Daniels said that Suffolk County Parks and others are concerned about bringing fill (topsoil) in. Very little will be brought in and placed in the low marsh areas, none will go in the channel.

## **6. CAC Discussion on Its Recommendation**

Reed suggested identifying whether or not the CAC could reach consensus on the question of: Does the CAC support the preferred remedy (Alternative Four) as it's been presented and summarized by Tom Daniels? There are three possible answers: Consensus, Yes, we support it; Consensus, no we don't support it; or, We can't reach consensus. Reed suggested the CAC do a survey around the table once the consensus process is done to see if there's any specific individual input that can be added on.

The CAC was reminded that they were in the middle of the public comment period that runs until June 25 and they were encouraged to provide their own organizational and individual comments directly to the Department of Energy.

Member Martin said he had a recollection that the costs for the alternatives were different. Between Alternative Two and Alternative Four, he thought there was more of a gap in the costs and questioned what had changed.

Daniels said the cleanup areas have been expanded. Areas where methyl mercury is being produced have been added to Alternative Four.

Reed asked if there was anything about the proposal that anyone cannot support.

Member Graves asked if Andy Rapiejko would briefly comment on the County's perspective on Alternatives Two and Four and how they came on board with Alternative Four.

Rapiejko: The County is supportive of Alternative Four. We worked very closely with the Lab on it. We feel that this is a good cleanup. It will address the problem of the contamination in the fish.

Reed asked if there were any CAC members who feel that their key interests cannot be met with the preferred remedy, Alternative Four, and that they need to block or consider blocking consensus because of that.

Member Martin: I would not block a compromise, but I cannot go along with consensus. I fail to see any difference between the new Alternative Four and Alternative Two. There's three or four percent difference in acreage, three or four percent in cost. As far as I'm concerned this so called Alternative Four is now Alternative Two. And the previous Alternative Four that I had more or less supported is longer available. I have a problem with the cost. How many lives will be saved by four million dollars? Is this the best-cost benefit in terms of improving the environment? In terms of lives saved? I'm not comfortable with saying .... (can't understand).

Discussion ensued on whether or not Member Martin's organization's key interests were met and whether or not he could support consensus. Some CAC members expressed their sentiments on the Alternatives.

Esposito: Originally I was one of the folks that was not supporting Alternative Four and my organization supported Alternative Two. We now are supporting Alternative Four because of the adjustments that have been made. Originally Alternative Four left out some hot spots in the upper reaches of the river. Those are now being captured. We didn't have the methyl mercury data that we do now. That provides an extra blanket of comfort which allows us to not only support Alternative Four but we look at where we were several years ago which was we'll just clean up to 9.8 ppm and above to where we've come today, it's been a very long but very productive road and we think that's a very good thing. We started out with Two and went over to Four and I don't know if that helps you or not but just for the record.

Bob Conklin: I'm not sure about not supporting consensus in this but I do have a problem with the changes that we seem to make in mid-stream with our End State Vision that we came up with in the middle of this. This bothers me at this point. We're being asked to go to consensus on Four which we pretty much agreed with right along, but the problem to me is that we've gone ahead and done this. We've got Area A done and we've got three quarters of Area B done according to Tom. What are we going to say now? In the future I would not like to see our deliberations here as far as CAC goes go into a position where the Lab gets three quarters the way done with something and then we're in position to have to say that's ok. My feeling at this point is that we're putting a rubber stamp on this now. We aren't really part of the decision-

making process when we stand here and give our stamp to Alternative Four. At this point unless someone can convince me of something different, I'm going to abstain from the vote. I'm going to abstain because I just don't feel comfortable with the way this took place. I've been assured by people who I trust here that the Lab has covered their bases as far as the regulators and all the rest of the procedures that go on but I ultimately feel that we somehow got lost in this process as far as our presentation goes and the CAC's aspect towards this. I stand to be corrected, I'm looking for someone to say you're off base, we've done this and we've done that. The gut feeling I end up with is that we're rubber-stamping something after it's half done. I hope that the other things we work on are not handled in this manner.

Tom Daniels reminded the CAC that an Action Memorandum was put in October for the onsite cleanup and the CAC went through a very similar process to this. The CAC didn't reach consensus then on Alternative Four. But the Lab was given input and when the Action Memorandum was finalized, the CAC input was used to craft Alternative Four. So to think that the CAC wasn't part of the process is a little misleading, they were an important part of the process. "We presented the onsite cleanup to you, you gave us input and we put that in the plan. We didn't circumvent the CAC."

Conklin: Why are you asking us for our position now?

Daniels: The CERCLA process requires us to get a Record of Decision on the entire cleanup as a whole. We have your input on the onsite work, but now we have to document everything in the Record of Decision so that's why we're revisiting both the onsite and the offsite.

Garber: I wouldn't like to block consensus but I would recall for everyone that there's been a tension here between those people who were more interested in cleanups and the removal of mercury and contaminants and the other group that was interested in preserving the ecosystem of the river. I think since we earlier met, by renegotiating the map of option Four certainly the people who are advocates of the cleanup clearly got more of what they wanted and there was more of the area of the river that is being disturbed. I just wanted people to realize what has happened. The modified Four is really Two B.

Anthony Graves: I would just point out that we're not decision-makers. We have provided input and the regulators are the decision-makers and it's the regulators who have decided what needs to be done. I don't feel like the group that was for preservation of the wetlands and didn't want to disturb the sediments lost, or another group won. We gave our input, the input was considered and ultimately the regulators, based on the Risk Assessment, said that the material needed to be removed. I respect Bruce and Bob's positions and in terms of consensus I would ask the question of what effect coming or not coming to consensus has on anything at this point?

Reed: That's a good question. Right now from the standpoint of your input in the process your individual input is very important. If you had a consensus recommendation up or down on Alternative Four that would also be an important sign to the decision-makers who still are going to make the ultimate decision associated with the ROD itself. It's another input. Consensus at this point is not essential. Individual inputs are still sought as well and I'm gathering them as we go along.

Schwartz: I'm the alternative not the rep, but the view of our organization, Friends of Brookhaven is really what's best for the Laboratory. We take that in a very broad perspective because in some sense what's best for the Lab includes what's best for the community. If the Lab is doing anything that is in anyway harmful to the community, then that's not good for the Lab. I have to take that perspective and apply that to this question. My own view on this is that if anything Four is kind of overkill with regard to actual protection of populations at risk from exposure to the materials that we dealing with. Concurrent with that is the possible ecological damage associated with it that Don just eluded to. But the other side of the coin is that we have

a proposal in front of us. It's widely approved by leaders on this panel and elsewhere, I think to stand in the way of this would bring more harm on the Lab even though I think it's kind of overkill and it fact inflict some temporary ecological damage. The ecology is very resilient. It will come back. So I'm not going to stand in the way of it, but I'm expressing some concern over process.

Esposito: I just wanted to say that in the vast majority of years working here I have felt similar to Bob. We've served on every single subcommittee ever created by the CAC. I think the exception is the Peconic River Cleanup Plan. Where I feel we went from a plan that I thought was extremely bad to a plan that I now feel my organization can support. It's protective of public health. And whether or not that's because of CAC or public input, I believe in part it is. I believe in part it's the devil's advocates from the Health Department. I do believe the CAC has played a role in strengthening the cleanup plan for the Peconic River. I understand your feeling, I've felt like that many times. But this instance I think is the exception.

Shea: Originally I was for Alternative Two and now that I've heard about the improvements in Four I feel that it's an excellent cleanup plan. I certainly wouldn't consider it overkill because I don't think there's any more important issue than human health especially health to children and unborn children. We have to consider future generations. I think this speaks very well for the Lab that they would take into consideration the community and the health effects and it will be beneficial for the Lab as far as the community is concerned.

The CAC continued to attempt to reach consensus. Further discussion took place regarding process, the definition of consensus, abstaining from voting and letting the rest of the CAC work toward consensus, whether or not Alternative Four was the best alternative, and reluctant support. As the discussion came to an end, Member Martin still did not feel he could support consensus.

Martin: I'm afraid that my vote for or even abstaining on consensus would affectively mean that I'm part of the consensus coupled with the CAC. I think that's not my position. I object to saying that there's consensus.

Graves asked that the CAC move toward a vote.

Reed: I want to gather comments from folks so that I can get the comments in the record and make sure I've done all that. Then we'll look at a super-majority vote.

Conklin: For future process I feel that if we're looking for consensus, which to be truthful with you I thought I understood consensus two years ago. I don't know now, I'm not clear in my mind what is consensus of the group and then what is abstaining from the group and then what a vote of no consensus from the group is. Because now we've come up with three categories where before we were working on two. You either agreed or you didn't. When it came to a vote you voted no or you voted yes. And now we've had the introduction of abstention. Riverhead Town and myself are in consensus on Four, there's no question about that in my mind. My problem is the procedure that was used over this six-year period of time that we've dealt with this problem. I was saying that I feel I need to abstain because of the procedure. I feel that you proceeded ahead with it. That you're going to do it no matter what. Now you're looking for a rubber stamp from me. I'm not saying the Lab didn't do an excellent job of bringing these comments into the fold and making use of what we were doing. That was not my intent at all in this. I'm just saying that I don't see the point of coming to a consensus now when it's half done. That's my only problem. And Four as far as the alternative, Riverhead Town has given me permission that they're interested in it. I feel that Four after all this is fine. It's as good as we can do with a give and take situation. My problem is the procedure. It's not enough to keep me from voting for consensus if we vote yes or no consensus. But if we end up with this abstention, otherwise I'm just saying that I would not like to see this happen again. I'd like to go to a consensus and then give that to the Lab. If it's late it's late.



Reed: I understand exactly what you're saying and that's important. Abstention should be used only when you want the group to go to consensus and you just aren't in a position to participate in it yourself. That's what abstention would be used for. The really important thing here is that nobody should stand aside if their core interests such as cost effectiveness are not being met. In fact stay with it until your core interest gets met because otherwise you can't support the conclusion of the group. The group doesn't get to come up with a compromise solution that meets everyone's core interests, it's up or down on Alternative Four.

Conklin: But if you evaluate that by individuals around this table I think the statement you used to use is "can you live with it?" You don't have to love it, can you live with it is what you kept telling us which is good....otherwise yes or no.

Geary: One of the items on the flip chart says additional cleanup is producing more disturbance of the river. On the term disturbance, we're talking about additional cleanup and costs for this cleanup and why that disturbs the river more than it is just because of its natural state. Radioactive contamination to me is about as unnatural as you can get and it's about as disturbed as it can get. As far as cost effectiveness goes, there's a lot brownfields on Long Island and the problem with all of them is that there's no money. The state will not pay for any kind of cleanup and here is an instance where we're even talking about how having the money is an issue and that it could be spent better some place else instead of cleaning up what is contaminated in our natural environment. It's just even amazing to me that we're even discussing this. I think the Lab should be commended, I don't think it's overkill.

Reed: The next part of the process is to examine super majority. Super majority means that you start with a quorum which you have this evening and then you put the vote to question and 75% of those present must agree with the question. You can vote yes. You can abstain, or you can vote No. Seventy-five percent of the members must approve it. That means that 15 members must say yes in order for it to happen.

Sprintzen: Let's move forward.

Esposito: Don't we have to first try to reach consensus?

Sprintzen: We already did that, we failed, let's move on.

Reed: I can go to closure here in about three minutes. Bruce, concerning this question can you live with giving your support to this statement?

Martin: No, I cannot.

Reed: We do not have consensus. So this is the statement, the CAC supports the preferred remedy, which is Alternative Four. Someone will have to call the question.

The question called by David Sprintzen, Anthony Graves seconded. Sixteen CAC members voted in favor of the motion. No CAC members voted no, and three CAC members abstained. The super majority motion passed.

## **7. Community Comment**

A member of the audience (Sarah Anker, CHEC) noted that people fishing and the consumption of fish is a real concern, a health issue. She asked what was being done to notify the people.

Amy Juchatz said the State Health Department is the agency that establishes fish advisories. They have looked at the fish data that has been collected and believe it supports the overall state-wide fish consumption advisory. No more than one fish-meal per week. The way people

are notified about that is when they buy their fishing license. They are given information and the general advisory is included.

## **8. BGRR Transportation, Fred Petschauer**

Fred Petschauer gave an update on the worker exposure issue and answered questions the CAC had regarding the Fort St. Vrain decommissioning. He said that last month he had discussed two decommissioning projects, one of them was Fort St. Vrain. CAC members had asked about releases to the environment during that decommissioning and how big their reactor was. He reported that any releases to air or water there were well below the federal limits and that the reactor at Fort St. Vrain is about four and one half times the size of the BGRR.

Based on bioassay samples that were analyzed from the individual exposed in the below ground duct an estimated exposure was calculated to be 22 mrem. To put that in perspective, 22 mrem is about equal to two chest x-rays. It was an unplanned exposure, it wasn't expected. The Lab took it seriously and did not allow work in the ducts for two weeks. A detailed cause-all analysis of what occurred was done and the conclusion was that it was some form of human error. The cartridge was either cross-threaded, not tightened correctly or something was hit and it was dislodged. Several corrective actions have been put in place. A representative from the manufacturer of the respirator company was brought in and all of the workers were trained by them. One of the things that came out of this was when the workers dressed to go into the below ground ducts the very last thing they would do is screw on the filter cartridge. They'd have the respirator on but it was easier to breathe without the filter cartridge. The proper technique that is being used now is to screw on the filter cartridge then put the respirator on. On top of that a second and a third check is performed before a person goes into the below ground duct to make sure the cartridge is installed correctly. A piece of tape is put around it on the third check. We also have a very detailed checklist now before someone goes down which includes that the respirator is on correctly. We're back at work, and the individual is back working.

Petschauer gave an overview of transportation and potential disposal facilities for the BGRR decommissioning. He compared the projected radioactive material shipments from the BGRR to RAD shipments in the U.S. per year and to the shipments from the decommissioning of Shoreham and Fort. St. Vrain. He described transportation regulations, conceptual waste processing, and radioactive material packaging. Petschauer also discussed DOE's expertise and training, accidents, and potential disposal facilities.

CAC members asked questions about boring the failed fuel channels and if that posed any additional risk. Whether the graphite blocks would readily come apart or if they might be fused together? If the casks were labeled so the public would know what's inside. If there was a limit on the level of radiation the truck driver could receive. Who cleans up if there is an accident? If the trucks will travel alone or in a convoy, and about routes. How these shipments compare to spent fuel shipments and about a state proposition in Washington.

Petschauer said that the casks will have placards that will describe the contents of the shipment. Truck drivers have a limit of 2mrem per hour, but it is a rare shipment where that level would be approached. In regard to accidents, driver's have instructions describing their load and the emergency response. Petschauer also talked about DOE's Radiological Assistance Program (RAP) and offered to have the BNL team make a presentation. Fred was not sure how the trucks would travel but said company's can take precautionary actions by placing governors on the trucks to limit speed, installing tracking devices, etc. Terry Kneitel, DOE, said drivers are given specific instructions on the routes they are allowed to take. Petschauer said the risks were low compared to spent fuel which would have to go into a type D cask and that's the biggest, heaviest container with the most lead. It's designed and engineered to withstand accidents. Petschauer said he had heard of the proposition but did not know the details.

Member Shea asked what the highest release of radiation as the result of a traffic accident.

Petschauer said he'd have to look it up.

**ACTION ITEM:** Provide release information.

Reed reminded the CAC members about the sign up sheet for the tour.

## **9. Agenda Setting**

### **July Agenda**

Groundwater ESD Input

BGRR PRAP Preview

BGRR PRAP Recommendation (Aug.)

STAR report (if material is available before the meeting)

Meeting adjourned at 10:17 pm.

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

2004	Affiliation		First Name	Last Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
L.I. Progressive Coalition	Alternate	None	None			No Mtg.					No Mtg.					
Lake Panamoka Civic Association (Biss as of 4/02)	Member	Rita	Biss	X		X	X	X	X	X						
Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99)	Alternate	Joe	Gibbons	O		O	O	O	O	O						
Long Island Association	Member	Matthew	Groneman	O		O	O	O	O	O						
Long Island Association	Alternate	William	Evanzia	X		O	X	X	O	O						
Longwood Alliance	Member	Tom	Talbot	X		O	X	X	X	X						
Longwood Alliance	Alternate	Kevin	Crowley	O		O	O	O	O	O						
Longwood Central School Dist. (switched 11/02)	Member	Barbara	Henigin	X		X	O	X	X	X						
Longwood Central School Dist.	Alternate	Candee	Swenson	O		O	O	O	O	O						
NEAR	Member	Jean	Mannhaupt	X		X	X	O	O	O						
NEAR (taken off ¾)	Alternate	Wayne	Prospect	O		O	O			O						
NSLS User	Member	Jean	Jordan-Sweet	X		X	O	O	X	X						
NSLS User	Alternate	Peter	Stephens	O		O	O	O	O	O						
PACE Union	Member	Allen	Jones	O		O	O	O	-	-						
PACE Union	Alternate	Philip	Plunkett	O		O	O	O	-	-						
Peconic River Sportsmen's Club (added 4/8/04)	Member	John	Hall					X	X	X						
Peconic River Sportsmen's Club	Alternate	Jeff	Schneider					X	X	X						
Ridge Civic Association (resigned in 03)	Member	Ron	Clipperton													
Ridge Civic Association	Alternate	None	None													
Town of Brookhaven	Member	Jeffrey	Kassner	O		O	O	O	O	O						
Town of Brookhaven	Alternate	Anthony	Graves	X		X	O	X	X	X						
Town of Brookhaven, Senior Citizens	Member	James	Heil	X		X	X	X	X	X						
Town of Brookhaven, Senior Citizens (open slot as of 4/99)	Alternate	None	None													
Town of Riverhead	Member	Robert	Conklin	X		X	X	X	X	X						
Town of Riverhead (K. Skinner alternate as of 4/99)	Alternate	Kim	Skinner	O		O	O	O	O	O						
Wading River Civic Association	Member	Helga	Guthy	X		X	X	X	X	X						
Wading River Civic Association	Alternate	Sid	Bail	O		O	O	O	O	O						
Yaphank Taxpayers & Civic Association	Member	Nanette	Essel	O		O	O	O	-	-						
Yaphank Taxpayers & Civic Association	Alternate	None	None													