

**Community Advisory Council
December 10, 2009
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. 2008 Site Environmental Report, George Goode, Environmental Protection Division
5. Community Comment
6. Agenda Setting Exercise

1. Attendance

Members/Alternates Present:
See Attached Sheets.

Others Present:

M. Bebon, P. Bond, J. Carter, J. D'Ascoli, T. Green, M. Holland, C. Janovsky, S. Johnson, M. Lynch, R. McKay, C. Parnell, A. Rapiejko,

2. Correspondence and Handouts

Items numbered one and two were mailed with a cover letter dated December 3, 2009. Item three was included in the member's folders, and items four through six were available as handouts.

1. Draft notes for November 12, 2009
2. Draft agenda for December 10, 2009
3. Copy of 2008 Site Environmental Report presentation
4. Copy of 2008 Site Environmental Report
5. Copy of 2008 Site Environmental Report summary
6. List of future agenda topics

3. Administrative Items

The meeting began at 7:11 p.m. Reed Hodgins reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Jeanne D'Ascoli, liaison to the CAC, said that there are two tours of the Brookhaven Graphite Research Reactor (BGRR) scheduled. The first one will be on January 5th in the afternoon and the second one is scheduled for the morning of January 6th. There will be a sign up sheet passed around for anyone interested. She also reported that Member Conklin is in the hospital awaiting a heart transplant. She said Peter Bond will give a presentation next month on the research that came out of the BGRR.

Approval of Minutes

Reed asked for corrections, additions, or deletions to the November 12, 2009 draft notes.

Member Sprintzen said that on page 6, his comment was that some bodily organs, including the thyroid, attract specific elements, not radiation. The notes were approved as amended with one abstention.

Tim Green, Cultural and Natural Resources Manager, reported that the Environmental Assessment (EA) for the BP Solar Project has been completed. DOE has issued a Finding of No Significant Impact (FONSI). A Notice of Availability will be out soon. D'Ascoli said an e-mail will be sent out to all CAC members with a link to the Environmental Assessment.

ACTION ITEM: Send e-mail to CAC members with link to EA.

4. Site Environmental Report, George Goode, Manager, Environmental Protection Division

George Goode said the Site Environmental Report (SER) is available online, as well as in hard copy. Copies of the full report and the Summary were available at the meeting. He said that there are green buildings on the cover because there is a big emphasis for new federal facilities to meet LEED standards.

Goode reported on the Environmental Management System (EMS), the Pollution Prevention (P2) Program, waste generation, energy management and conservation, environmental compliance, spills and reportable incidents, and air and water quality. He said that BNL has been certified to the ISO 14001 standard since 2001, received three environmental awards in 2008, and has an excellent electronics recycling program.

Member Sprintzen asked for a clarification of the recycling program.

Goode said the Laboratory uses a contractor that does the recycling in the United States, so their activities are monitored.

Member Giacomaro asked who does the dismantling of the materials and where it is done.

Goode said all the dismantling is done at the company's facility in New Jersey.

Goode said the (P2) Program is expanding. In FY08, \$16,000 was invested in the P2 Program with an annual cost savings of \$14,000 from new projects.

As a result of research and cleanup activities, BNL generates regulated waste which is disposed of at licensed facilities that are audited by the Lab and regulators. Waste is generated from routine and non-routine operations. The non-routine waste is mainly from cleanup projects.

He explained that BNL manages energy usage and conservation and has been able to significantly reduce the amount of energy used at the Lab. Energy use per square foot in 2008 was 30% less than that used in 1985 and 11.6% less than in 2003.

Member Esposito said there seems to be a dramatic drop in the amount of energy consumed. She asked if the reduction is attributed to greater efficiency in the buildings or conservation measures.

Goode said there are a lot of things contributing to this effort and a new Executive Order will require even further reductions in water consumption, fuel for transportation, energy use, and requires federal agencies to establish targets for greenhouse gas reductions. Because the Laboratory has already made significant reductions, Goode said it may be difficult to meet the new requirements.

Member Guthy asked who the new order applies to.

Goode said it is for all federal agencies.

Member Garber commented that if a structure is taken down, that will reduce the total square feet, which tends to raise the numbers.

Goode said usually the construction square footage is equal to the demolition square footage.

Michael Bebon, Deputy Director for Operations, said one factor to consider is that this is not adjusted for temperature, so it bounces around depending of the severity of the weather.

Goode said that BNL must comply with 34 environmental permits. The Lab was inspected by regulatory agencies 11 times in 2008 with only 1 Notice of Violation (NOV) for Resource Conservation and Recovery Act (RCRA) waste labeling. BNL is now near 100% PCB free with only one PCB article remaining. He said there were 3 permit excursions under the SPDES Wastewater Permit, none of which were significant. Extensive monitoring is being conducted in 2009 under the new SPDES permit.

Member Giacomaro asked if items containing PCBs are recycled.

Goode said, no, they are disposed of.

Goode reported that the Laboratory has complied with all drinking water requirements. Minor deficiencies have been found in some underground storage tanks, all of which have been corrected.

Goode said that BNL is subject to very stringent reporting requirements regarding spills, with any spill to soil being reportable. There were 22 spills in 2008, 9 of which were reportable to NYSDEC. Spill awareness training for employees has been very effective.

Goode said three facilities are monitored for radionuclide air emissions – BLIP, Bldg. 801, and the HFBR. There are nine onsite locations around the perimeter of the site where the air quality is monitored. Radiological concentrations were consistent with natural background levels with the exception of the area near the HFBR due to periodic venting of the reactor vessel during D&D activities. There is continuous emissions' monitoring of the air quality (non-radiological) at the Central Steam Facility. Emissions were well under the permit limits.

Member Peskin asked what determines what is sampled for with non-radiological air and water.

Goode said air is regulated by the Labs' Title V Air Permit. Samples are taken from degreasing operations, painting operations, and soldering operations. The SPDES permit dictates that the Lab's Sewage Treatment Plant be monitored for 160 different chemicals.

Member Garber asked if, in relation to the SPDES permit, the appeals process had been started to possibly get relief from the stringent requirements for next year.

Goode said, no, because we don't have the results of the quantification and removal study yet. The Lab is sampling now to get the data to determine what treatment technologies will be useful. Then a decision will be made whether or not an appeal is necessary.

Member Heil asked for the economics of the e-waste recycling program.

Goode said he does not know, but from the Lab's prospective it's a plus because the old monitors, which are now being replaced by flat screens, have lead in them.

Member Giacomaro asked if there was a spike in tritium detection in 2008.

Goode said there was one detection that was right at the limit, but it could have been a false positive.

In 2008, the Sewage Treatment Plant effluent was at, or below background levels. No activity was detected at the recharge basins or the Peconic River that was above background.

Tim Green, Cultural and Natural Resources Manager, reported on the Natural and Cultural Resources chapter of the SER. He covered flora and fauna monitoring and natural and cultural resource management. He said testing of local farm and garden vegetables, which is done every 5 years offsite, showed no detection of cesium-137 and farm soils were at background levels. On and off-site fish sampling indicated low levels of cesium-137 and mercury consistent with previous years and with Peconic River post-cleanup data. On and off-site aquatic vegetation and sediments contained low levels of cesium-137 consistent with previous years. Quarterly analysis for radiological components in precipitation indicated normal background levels. Mercury analysis indicated depositional values between 4.5 and 13.7 ng/L.

Member Guthy asked for an explanation of depositional values.

Green said that is what is deposited from the sky in precipitation.

Member Giacomaro asked if that is good or bad.

Green said that it shows that there is mercury being deposited from the sky.

Member Birben asked if any information was taken from local farms for comparison and if the fish sampling from the Peconic River was on or offsite.

Green said there is a vegetable garden onsite and the Lab also takes samples from farms out east. The fish sampling comes from the Peconic River both on and off-site.

Green said there were 3 deer sampled onsite and 13 off-site. Bone samples analyzed for strontium-90 indicate background levels. The cesium-137 average onsite was 0.89 pCi/g and offsite within one mile was 2.32 pCi/g with the highest value at 8.61 pCi/g. Deer located greater than one mile from the Lab averaged 0.29 pCi/g. There has been a downward trend since 1999.

Member Bush asked if there is any relationship between the age of the deer and the average cesium-137 content.

Green said typically no, however, there is a seasonal difference.

Reed asked what the average would be without the one high sample.

Green said it would be about 1.5 pCi/g.

Green discussed the Radiological Dose Assessment which is done each year to calculate radiological exposure for a hypothetical maximally exposed individual (MEI) who lives at the site boundary, eats homegrown vegetables and locally caught fish and deer. The result showed a worst case scenario dose of 12.63 mrem. DOE's regulatory limit is 100 mrem; NYDOH's

regulatory limit is 10 mrem. Green explained that in order to get the total dose of 12.63 mrem, the MEI would have to consume 64 lbs. of deer meat at the highest concentration.

Member Corrarino asked if the deer with the high level of cesium-137 was from offsite.

Green said it was near the site boundary. The Laboratory offers hunters the opportunity to bring their deer meat in to be tested.

Member Esposito asked how far over the healthy average the Lab's deer population was.

Green said the Lab should have between 80 and 250. There are 800 deer onsite.

Member Giacomaro asked if the number of deer is alarming and if the Lab is tracking the fox population onsite.

Green said the number is not alarming. The Lab has started management planning for deer. It is difficult to track fox, in 2008, only two were trapped. Green said there are also approximately 500 wild turkey onsite. Research is currently being conducted by interns at BNL on the eastern box turtle, red and grey fox, salamanders, damselflies & dragonflies, leopard frogs and banded fish.

Member Esposito asked if those results are published.

Green said the information is published in student papers. He said he could make that information available.

ACTION ITEM: Make information available to CAC.

Note: Student research papers and posters are available online at:
<http://www.bnl.gov/esd/wildlife/research.asp>

Green said the Laboratory's Office of Education established the Open Space Stewardship Program, which now has 15 teachers, 30 schools, and over 1,500 students participating. He reported that the Lab hosted a "Casing of the Colors" ceremony when the U.S. Army's 77th Division, which was born at Camp Upton in 1918, retired their colors.

5. Community Comment

There were no comments from the community.

6. Agenda Setting Exercise

Copies of the Agenda Topics list were passed out to CAC members. Reed then read through a list of future and follow-up topics prepared by the Laboratory. The topics read from the flipcharts were:

- BNL Blueprint
- Site Environmental Report
- Annual Groundwater Report
- SPDES Studies
- BGRR
- HFBR
- ARRA Projects
- Nano
- Nuclear Plant Safety

Phyto-Bacterial Contamination Remediation Research
Renewable Energy Research
CAC Process
BGRR Research

The CAC members agreed to those topics and suggested additional agenda topics that included:

Squirrel Monkey Research Proposal Follow-up
Home Energy Efficiency Initiative
Tech Transfer & IP
Lab Research on Climate Change & How It Fits into International Picture (Member Schwartz suggested a presentation by Alistair Rogers on the FACE project.)
Research on Deforestation
Invasive Species
Drug Addiction Research
BNL Solar Project
Solar Research
BNL Research Overview

Reed asked the CAC to e-mail any additional topics to Jeanne D'Ascoli.

D'Ascoli told the CAC that for the January meeting there will be an update on the Annual Groundwater Report by Bill Dorsch and a presentation by Peter Bond on the research that has resulted from the BGRR. She said that she will look into the topics suggested by CAC members to make sure they are issues/areas that are related to Lab research, if not she will not pursue them. The remaining items will be prioritized after the research. She wished everyone a happy and safe holiday.

The meeting adjourned at 8:52 p.m

P = Present	2009	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
ABCO	(Garber added on 4/10/02)	Member	Don	Garber	P	P	P	P	P	P				P	P	P	P
ABCO		Alternate															
Brookhaven Retired Employees Association	(Peskin replaced Campbell 09/09)	Member	Arnie	Peskin	P	P	P	P	P	P				P	P	P	P
Brookhaven Retired Employees Association	(L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)(Franz 12/09)	Alternate	Eena-Mai	Franz	P					P							P
CHEC (Community Health & Environment Coalition)	(added 10/04)	Member	Sarah	Anker							P				P		P
(added 12/08)	(R. Andrejkovics removed 9/09)	Alternate			P		P	P									
Citizens Campaign for the Environment		Member	Adrienne	Esposito	P	P	P	P						P		P	P
Citizens Campaign for the Environment	(Ottney added 4/02-taken off 1/05 Mahoney put on)(7/06 add Kasey Jacobs)(K. Jacobs off 1/08)	Alternate															
Colonial Woods Whispering Pines	(added 06/09)	Member	Christine	Birben							P			P	P	P	P
Colonial Woods Whispering Pines	(added 09/09)	Alternate	Joan	Milner										P			
E. Yaphank Civic Association		Member	Michael	Giacomaro			P	P	P	P						P	P
E. Yaphank Civic Association	(J. Minasi new alternate as of 3/99) (M. Triber 11/05) (Munson 6/06) (Feinman 2/09)	Alternate	Bob	Feinman		P	P			P	P			P	P		P
Educator	(changed 7/2006)	Member	Adam	Martin							P			P			
Educator	(B. Martin - 9/01)	Alternate	Bruce	Martin						P							
Educator	(A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02) (changed 7/2006)(Bush 5/09)	Alternate	Greg	Bush						P	P			P	P	P	P
Fire Rescue and Emergency Services		Member	Joe	Williams													
Fire Rescue and Emergency Services		Alternate	Don	Lynch	P	P	P										
Fire Rescue and Emergency Services		Alternate	James	McLoughlin													
Friends of Brookhaven	(E.Kaplan changed to become member 7/1/01)	Member	Ed	Kaplan		P	P									P	
Friends of Brookhaven	(E.Kaplan changed to become member 7/1/01)(Schwartz added 11/18/02)	Alternate	Steve	Schwartz	P			P	P	P				P	P	P	P
Health Care		Member	Jane	Corrarino			P	P							P		P
Health Care		Alternate															
Huntington Breast Cancer Coalition		Member	Mary Joan	Shea	P	P	P	P	P					P	P	P	
Huntington Breast Cancer Coalition		Alternate	Scott	Carlin			P										
Intl. Brotherhood of Electrical Workers/Local 2230	(S.Krsnak replaced M. Walker 1/11/07)	Member	Scott	Krsnak	P		P							P	P	P	

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