

**Community Advisory Council
February 8, 2018
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. 1,4-Dioxane Sampling Update
5. Beamline 5-ID at NSLS-II
6. Community Comment

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: J. Anderson, J. Carter, B. Dorsch, P. Genzer, R. Howe, R. Laasch, F. Mancini, D. Manning, G. Mattson, R. McKay, A. Ozelis, D. Paquette, V. Racaniello, J. Remien, N. Sundin

2. Correspondence and Handouts

Items numbered one and two were e-mailed to Members on February 1, 2018. Items numbered three through seven were available as handouts at the meeting.

1. Draft agenda for February 8, 2018
2. Draft notes from the January 11, 2018 meeting
3. Copy of Presentation: 1,4-Dioxane Sampling Update
4. Copy of Presentation: Beamline 5-ID at NSLS-II
5. Copy of handout: EPA Technical Fact Sheet – 1,4-Dioxane
6. Copy of handout: 1,4-Dioxane Results from Monitoring Well and System Sampling
7. Copy of handouts: Two enlarged maps 2017/2018 Groundwater Monitoring Sampling Program for 1,4-Dioxane

3. Administrative Items

The meeting was called to order at 6:32 pm. Michael White, facilitator, welcomed everyone to the meeting. He reviewed the ground rules and draft agenda and those present introduced themselves.

White said the response to last month's Action Item requesting information on 1,4-Dioxane is included on the table with this month's handouts.

Approval of Minutes

The January notes were approved as written with none opposed and five abstentions.

Agenda Setting

Michael White said that next month, David Manning will be giving the CAC an overview presentation and we will have an agenda setting exercise for future topics of interest.

4. 1,4-Dioxane Sampling Update, Jason Remien – Manager, Environmental Protection Division

Remien said that 1,4-Dioxane is a volatile organic compound that has been widely used as a stabilizer for 1,1,1-trichloroethane (TCA). There is no federal maximum contaminant level (MCL) or specific New York State standard. The current limit for an unspecified organic contaminant is 50 µg/L. In 2016 NYSDEC/NYSDOH formally suggested that BNL analyze for 1,4-Dioxane within site plume core wells that have or had TCA. The CAC was briefed in March 2017 on the groundwater samples collected in January 2017. Concentrations ranged from 0.18 µg/L to 18.6 µg/L. In response to a September 2017 request by the SCDHS, BNL obtained additional baseline data on the distribution of 1,4-Dioxane by sampling seven additional groundwater monitoring wells and the effluent from five currently operating groundwater treatment systems and the Sewage Treatment Plant. Samples were collected from 13 locations in early December 2017.

Five of the seven monitoring wells had detections up to 9.08 µg/L. Four of the five groundwater treatment system effluent samples had detections up to 7.14 µg/L. There was no detection in the effluent from the Sewage Treatment Plant. All concentrations were below the current NYS standard of 50 µg/L.

BNL's drinking water supply wells were tested by SCDHS from 2015-2017 and no 1,4-Dioxane was detected. SCWA tested drinking water supply wells in the vicinity of the Lab and also did not detect 1,4-Dioxane.

The new monitoring results were reviewed with the regulators on February 1st and those results will be included in the 2017 Groundwater Status Report.

BNL will continue to monitor the regulatory status on this emerging contaminant of concern and keep the CAC informed.

Member Esposito asked what the lowest detectable level is.

Remien said we can detect down to a level of .2 µg/L. We are just collecting baseline data right now.

Member Sicignano asked what area it was that had a level of 9.08 µg/L, and how many times was that area re-tested.

Remien said it is an off-site area where there was a TCA plume. It was only tested once.

Member Shea asked what depth was chosen for the different areas of testing.

Remien said existing wells were used for the testing so they were various depths. This is just a starting point.

Member Heil asked if TCA analysis was done concurrently with the 1,4-Dioxane testing.

Remien said not for this sampling. We tested for both back in January and found no correlation.

Member Esposito said the current treatment methods are not effective for 1,4-Dioxane, advanced oxidation works but is very expensive.

Member Schwartz asked if concentrations are measured after the effluent has gone through treatment.

Remien said yes, we know that the treatment systems do not work for 1,4-Dioxane. We do know that 1,4-Dioxane is not present in BNL's drinking water supply.

Member Sicignano asked if the Lab will just monitor this or attempt to clean it up.

Remien said in April, testing will be done by SCWA. We are waiting for them to set a standard.

Member Esposito said technology to filter 1,4-Dioxane is not on the market yet. Other states have set limits from .35 to 3.0 µg/L. The NYS standard will end up being below the current limit of 50 µg/L.

Member Schwartz said the EPA Fact Sheet indicates it has been found at many Federal facilities.

Remien said it was used as a stabilizer. Federal facilities are not the only ones that have used it.

5. Beamline 5-ID at NSLS-II – using x-ray for microscopy and spectroscopy, Juergen Thieme – Energy Sciences Directorate

Juergen Thieme spoke to the CAC about the use of x-rays for microscopy and spectroscopy. He discussed the resolution of a microscope and optical microscopy using visible light. He spoke about the discovery of x-rays in 1895 and showed several pictures depicting their improvements. He said synchrotron radiation is an excellent way to create a brilliant x-ray beam. He spoke about building a synchrotron radiation facility and talked about the injection system, booster ring, storage ring, and the beamlines. He said NSLS-II is one of the world's most advanced synchrotron light sources and spoke about some of the capabilities. He said there are currently 19 operating beamlines and another 10 under development. He spoke about the need for fundamental research. He went on to discuss his specific beam line, SRX, which uses fluorescence spectromicroscopy. He cited its use in many studies.

Member Sicignano asked what the life expectancy is for a light source.

Thieme said about 25 years.

Member Schwartz asked if an industrial client pays for the use of the beamlines.

Thieme said not if the information is being published. If they want to keep the information for themselves, that is considered proprietary, and they do pay for that.

6. Community Comment

White asked for comments from the community. There were none.

Member Esposito said large cuts in science funding are predicted in the budget to be released on Monday. How will this impact the Lab?

David Manning said members of Congress have expressed support for science. The Senate budget is a two year deal. It is not clear what the impacts to the Lab will be.

Jack Anderson said we will be following this closely next week. The President's budget on Monday is the start of a long process. Signals are encouraging for science.

Manning said we will keep the CAC informed.

The meeting adjourned at 8:22 PM.

Next meeting: March 8, 2018

				Jan	Feb	Mar	Apr	May	June	July No mtg.	Aug No mtg.	Sep	Oct	Nov	Dec
P = Present	Affiliation	First Name	Last Name												
	ABCO – Civic (Garber - 04/02) (Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan		P									
	(Madigan -10/10)	Alternate	Michael	Madigan	P										
	American Physical Society – Business & Labor	Member	Reinhart	Schuhmann		P									
	(Schuhmann 1/14, member 9/15)	Alternate	Donavan	Hall	P										
	Brookhaven Coalition of Chambers of Commerce – Bus & Labor (added 6/15)	Member	Ron	Trotta											
	Brookhaven Retired Employees Association- BNL (Peskin - 09/09)(Franz 1/17)	Member	Eena-Mai	Franz	P	P									
	(Franz - 12/09)(Israel 1/17)	Alternate	Mark	Israel	P										
	(Shapiro-1/13)	Alternate	Steve	Shapiro											
	Citizens Campaign for the Environment – Advocacy & Environment	Member	Adrienne	Esposito	P	P									
	(Somma 11/16)	Alternate	Harry	Somma											
	Colonial Woods Whispering Pines – Civic (Birben - 06/09) (O’Neal 01/15, removed 10/15)	Member													
	(Rehbein -11/10)	Alternate	Eric	Rehbein											
	Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	P										
	(Meade – 06/12, Jim M 10/12, Turk 1/16)	Alternate	Rosa	Turk		P									
	East Yaphank Civic Association	Member	Michael	Giacomaro	P	P									
	(Feinman - 02/09 – 11/15)(Mack 11/15)	Alternate	Catherine	Mack		P									
	Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt											
	Foundation for Economic Education – Ed, Sci, & Tech (5/14)(Martin – 10/14)	Member	Bruce	Martin		P									
	(Pratka – 10/14)	Alternate	Craig	Pratka	P										
	Friends of Brookhaven- BNL (Kaplan 07/01–11/15)(Bowerman 11/15)	Member	Biays	Bowerman	P										
	(Schwartz - 11/02) (Ocko added 11/15)	Alternate	Steve	Schwartz		P									
		Alternate2	Ben	Ocko											
	Huntington Breast Cancer Coalition – Health-Based Rep	Member	Mary Joan	Shea		P									
		Alternate	Scott	Carlin											
	Individual	Member	Jane	Corrarino											
	Individual	Member	Karen	Blumer											
	Individual	Alternate	Michael	Madigan		P									
	L.I. Pine Barrens Society – Advoc & Env	Member	Richard	Amper											
	(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)(Muether added – 5/15)	Alternate	Katie	Muether	P										
	L.I. Progressive Coalition – Advoc & Env	Member	David	Sprintzen	P	P									

				Jan	Feb	Mar	Apr	May	June	July No mtg.	Aug No mtg.	Sep	Oct	Nov	Dec
P = Present	Affiliation	First Name	Last Name												
	Alternate														
	Lake Panamoka Civic Association (Biss - 04/02)(Staddon 10/17)	Member	Richard	Staddon											
	(Grandal - 10/10)	Alternate	Bonita	Grandal											
	Longwood Central School Dist. – Ed, Sci, & Tech (Castro -06/09)(Adams 9/15)	Member	Tracy	Adams											
	(Gerstenlauer removed & Sterne added 5/14 removed 9/15)(Infranco1/17)	Alternate	Paul	Infranco											
	Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano		P									
		Alternate	Clara	McManus											
		Alternate	Joe	May											
	Middle Island Civic Association (Filler 2/17)	Member	Martin	Filler	P	P									
	(Nowak 01/15 – 5/15)(Malloy 9/15)	Alternate	Margaret	Malloy											
	NLSL-II User Committee – BNL	Member	Jean	Jordan-Sweet	P	P									
	(Ravel -02/11-9/15)(Bohon added 11/15)	Alternate	Jen	Bohon											
	Ridge Civic Association (Henagan removed 9/15)(Chattaway added 10/15)	Member	Wesley	Chattaway	P	P									
	Suffolk County Legislature 1st Dist. - Government (added 6/15)	Member	Al	Krupski											
		Alternate	John	Stype	P										
	Teachers Federal Credit Union – Bus & Labor (Murdocco 3/15)(Stafford 1/18)	Member	Christine	Stafford	P	P									
		Alternate													
	Town of Brookhaven (Graves –06/06)-(removed 1/2015)	Member													
		Alternate													
	Town of Brookhaven, Senior Citizens Office - Government	Member	James	Heil	P	P									
		Alternate													
	Town of Riverhead - Government (Doroski - 04/11)	Member	Isidore	Doroski	P										
	(Hulme - 04/11 - 4/14)(Janis Rottkamp 04/16)	Alternate	Janis	Rottkamp											
	Wading River Civic Association (Rundlett 09/16)(Kneitel 02/17)	Member	Terri	Kneitel	P										
	(Bail and Guthy removed 11/2016)	Alternate	Linda	Rundlett		P									