

Jeffery C. Camplin, CSP
1681 Verde Lane, Mundelein, IL 60060

1-708-284-4563
Fax: 1-847-837-1852

November 23, 2005
(revised November 27, 2005)

Waukegan Harbor Citizens Advisory Group
Box 297
Waukegan, Illinois 60079

Attention: Waukegan Harbor CAG

Re: • Tremolite Asbestos and PCB's Found at Waukegan Harbor & Beach Areas
 • USEPA Waukegan Beach Clean-up

Dear Waukegan CAG Membership,

Thank you for the opportunity to attend your November 17, 2005 CAG meeting in Waukegan. Although it was impressive to see the list of CAG membership, it was more impressive to note that I was attending the 166th meeting of this group. It is obvious that a lot of time and energy has been dedicated to Waukegan Harbor environmental issues. It is refreshing for the public to be able to get concerns and questions answered in an open, honest, and transparent manner. This letter serves to document many of my questions and concerns that could not be answered at the November, 2005 meeting. Many of my concerns are time-sensitive and deserve immediate attention by several CAG members and associates.

I am the president of a safety and environmental consulting firm in Illinois with primary expertise in occupational safety and health and asbestos. I am a Certified Safety Professional, a Certified Professional Environmental Auditor, a Registered Environmental Professional, and an Illinois licensed asbestos professional. As I mentioned at the November CAG meeting, I have been doing some volunteer environmental and safety consulting for the Illinois Dunesland Preservation Society regarding asbestos and other chemical contamination from North Point Marina at Illinois Beach State Park down through the Chicago lakefront.

I recently visited Waukegan public beach in June, 2005 and found approximately 25 pieces of friable asbestos debris strewn along the Waukegan shoreline. I immediately notified Mr. Paul Kakuris, President of the Illinois Dunesland Preservation Society, who then contacted the Waukegan Mayor's office. Two separate letters were sent to Waukegan Mayor Hyde. The first letter was sent on June 24, 2005 which addressed the friable asbestos debris that I had found on the Waukegan beaches. The *News Sun* also ran a front page article on my findings on July 7, 2005. The second letter to Waukegan Mayor Hyde was dated July 23 and responded to inaccuracies in the Mayor's July 22 reply to Dunesland's first letter. This second letter discussed asbestos and the PCB contaminated soils in more detail. Finally, I also attended a meeting on July 8 with Mr. Kakuris at the Waukegan City Engineering's Office where we made Mr. John Moore aware of the potential exposures to citizens who are currently unaware of the known PCB and asbestos contaminants

(including tremolite asbestos) found at or near the Waukegan beach. I will ask Mr. Kakuris to make all of the above reference documents available for CAG members to review.

I also reviewed a June, 2005 interim report by the University of Illinois – Chicago that found the presence of elevated levels of the rare, but extremely toxic, tremolite asbestos-contaminated sediments in the approach channel at Waukegan Harbor. I additionally reviewed a Public Health Assessment performed by the Center for Disease Control's ATSDR for PCB contamination in the public beach sands along the Waukegan shoreline. This 2004 study found that PCB's are potentially entering Lake Michigan from a discharge ditch at the north side of the OMC property. This discharge crosses the Waukegan beach entering the federal and state navigable waters of Lake Michigan. The ATSDR study found that the public could be exposed to PCB's if bare feet came into contact with this discharge stream. The report also found that public exposure to PCB's could result if the sand was disturbed and the toxic PCB's and microscopic asbestos became airborne. Although I assume the USEPA or other CAG members have already discussed this important public health document at previous CAG meetings, CAG members can read the findings of this 2004 Public Health Assessment for themselves at http://www.atsdr.cdc.gov/HAC/PHA/outboard/out_p2.html#B.Human.

With this background, I pose the following questions and concerns as a follow-up to the November 17, 2005 CAG meeting:

Remediation of Beach Sand on Shoreline in Front of OMC Property

On November 17, 2005 a partial presentation was made by the USEPA regarding remediation of contaminated sand along the beach in front of the OMC property. My concerns are that visible asbestos and known PCB contamination exists at multiple locations in this area.

- Visible and microscopic asbestos has been identified at Illinois Beach State Park to the north.
- The beach in front of Johns-Manville has been also been found to have microscopic tremolite asbestos contamination.
- The Johns-Manville Superfund site has been found at times to release trillions of asbestos fibers daily into Lake Michigan from a pipe outfall at their Superfund site.
- Johns-Manville was also cited by the state for exceeding NPDES permit asbestos discharges into the federal and state navigable waters of Lake Michigan in May, 2002.
- Sediments in Waukegan Harbor were found to contain microscopic asbestos, including tremolite in 2005.
- Dredged sediments from in front of the Midwest Generation water intake, the warm water effluent channel, and in the water and the channel's banks have been previously found by IDNR, IEPA, and USEPA to contain visible and microscopic asbestos.
- Finally, I personally found multiple pieces of friable asbestos chunks on the Waukegan beach front in June 2005 at various areas north of the pier for approximately 2.5 miles.

In fact, the toxic nature of these sands is why the contaminated shoreline in front of OMC will be removed under USEPA supervision immediately after Thanksgiving 2005 according to USEPA.

Yet the public had, and still has, unrestricted full access to this area known to be contaminated with asbestos and PCB's.

- No signs have been posted on the Waukegan shoreline warning of the presence of asbestos and PCB contamination.
- No fence or barrier keeps the public or their pets out of this polluted Superfund area.
- I personally walked through this area when I found the pieces of friable asbestos, unaware of the PCB contamination in the water and sand until I researched its existence several days later.
- Several families including those with small children were on the Waukegan beach the day I visited. Kids were playing in the OMC ditch PCB water discharge entering Lake Michigan with bare hands and feet.

The Public Health Assessment performed in 2004 found that the public walking in the OMC PCB-contaminated ditch water discharge in bare feet was an exposure route that should be avoided. How is the public being made aware of these apparent PCB exposures that have already occurred and what is being done to prevent further exposures?

Approximately a half mile of the shoreline sand had been pushed from the waterfront west towards the OMC property with heavy equipment over the summer which disturbed these asbestos and PCB-contaminated sands. This action also caused the PCB-polluted waters to pool up behind the makeshift dike formed from the large amount of sand pushed to the west. Around the Fourth of July weekend, this now larger area of contaminated water eventually broke through the contaminated sands resulting in a potential increase in the amount of contaminated sands in this heavily-visited public area. Mr. Kakuris has photos of this area for CAG members to review.

This is the same area where the Mayor of Waukegan invited the media to attend his press conference announcing the purchase of the OMC property during the Fourth of July weekend. I am concerned that an unaware general public, media members, and various workers were allowed free access into an unprotected area for years where known PCB and asbestos contamination exists. The September, 2005 Waukegan Harbor CAG minutes also discussed the Youth Conservation Corps adopting the Waukegan Municipal Beach to clean-up debris and garbage from the area.

Questions:

1. Should the Youth Conservation Corps be picking up debris in an area that is known to have asbestos debris, PCB-contaminated sand, and possible microscopic tremolite asbestos contamination without any warnings or precautions taken?
2. Why weren't proper warning signs or restrictive fences placed on the beach to notify and protect the public of the presence of PCB and asbestos contamination known in beach sands on the Waukegan shoreline?
3. Why was the PCB and asbestos-contaminated sand allowed to be moved during the summer of 2005 causing potential airborne exposure to PCB and asbestos fibers to the public down wind?
4. Were the USEPA and/or IEPA aware of this activity and was a permit or approval necessary?
5. Was the USEPA aware of this disturbance to the PCB-contaminated sand?
6. Were the workers moving the sand with heavy equipment aware of the PCB and asbestos contamination?
7. Were they properly trained and protected?

8. Was the heavy equipment used to move the asbestos and PCB-contaminated sand in front of OMC decontaminated before leaving the site to travel on public roads?
9. Was air monitoring performed during these activities to evaluate the airborne levels of asbestos fibers and PCB's?
10. Were workers or the public notified about their potential exposure to airborne PCB and asbestos when this contaminated sand was moved and disturbed?
11. Why were the PCB and asbestos fibers on the contaminated beach moved by heavy equipment and mixed with potentially non-contaminated adjacent sand areas during the summer causing the potential spread of PCB contamination?
12. Does this disturbance of the PCB and asbestos-contaminated beach sand increase the scope of USEPA supervised remediation necessary in this area later this month?
13. Will the upcoming USEPA PCB remediation scope of work include the expanded areas of beach sand where this asbestos and PCB-contaminated sand was moved and mixed during the summer of 2005?
14. Does the USEPA PCB remediation of Waukegan beach sand scheduled for right after Thanksgiving, 2005 include training, protective equipment and proper work practices for visible asbestos removal and disturbing potential microscopic tremolite asbestos-contaminated beach sands?
15. Has the beach sand been tested for the presence of the dangerous tremolite asbestos (found in the Waukegan Harbor approach channel sediments and to the north at Illinois Beach State Park) prior to developing a remediation plan for the OMC shoreline?
16. Are any CAG members aware of any historic sources of tremolite mineral use or tremolite asbestos-contaminated products used in or near the Waukegan Harbor area?
17. Has the public been notified that adults, children or pets who have crossed the PCB-contaminated discharge waters from the OMC property may have been exposed to asbestos and PCB's?
18. Have families who have visited these asbestos and PCB-contaminated areas been notified that this contamination on their pets and clothing may have been unknowingly tracked into their cars, and potentially into their homes?
19. Are there any immediate plans to place warning signs and/or fences in this area to restrict further access to this PCB and asbestos-contaminated shoreline in the future?
20. Is there a reason why no warnings were provided to the public in the past regarding potential hazards in publicly accessible areas of the lakefront?
21. Who is/are the party/parties responsible for warning the public regarding the potential exposure routes listed in the 2004 ATSDR report on PCB exposure along the Waukegan shoreline?
22. Should the planned USEPA supervised remediation work of contaminated beach sand in front of the OMC property be placed on hold until a USEPA re-evaluation is performed of the sand disturbance to better define a possible expanded scope of work, revised work practices and worker protection, and identify additional contaminants of concern, such as tremolite asbestos?

Harbor Sediment Dredging

The USEPA presented a brief update at the CAG meeting on the sediment dredging and disposal at Waukegan Harbor. It was stated that approximately 285 tons of asbestos and PCB-contaminated sediments and 85 tons of non-contaminated sediments would be removed and disposed of. PCB contamination was identified as greater than 1 ppm.

Asbestos contamination was not initially defined. I asked the USEPA what level of asbestos contamination would classify the dredged harbor sediments and sand as asbestos-contaminated. USEPA had a hard time answering what asbestos levels in dredged sediments would be considered contaminated. Eventually, the USEPA admitted that greater than 1% asbestos was used but that may not be an appropriate concentration. In fact, this 1% level is in conflict with the most current USEPA guidance which found soils containing 1% or less asbestos should not be used to determine clean-up objectives for Superfund sites. This 2004 USEPA guidance policy can be viewed at <http://www.epa.gov/region09/toxic/noa/eldorado/pdf/memo722b.pdf>. This new position by USEPA was based upon the high toxicity of tremolite asbestos in quantities well below 1%. The ABC News Show “Nightline” ran two shows highlighting the toxic hazards associated with tremolite asbestos contamination earlier this month. A short 10 minute clip from the show can be viewed at <http://abcnews.go.com/Video/playerIndex>. From this site select “Nightline” on the right-hand side and scroll down to the video entitled “The Poisoning of Libby Montana.”

At the November 17, 2005 CAG meeting, I asked for documents regarding the testing and decision making on determining asbestos-contamination levels in the harbor sediments. The USEPA did follow-up and provide me with a testing document, but to date has not provided a decision-making documents regarding what constituted asbestos-contaminated levels of harbor sediments. The analytical method selected by USEPA is designed to analyze building materials for the presence of asbestos. I know this because I set up an asbestos lab and have training on asbestos analytical methods since 1987. This analytical method is not an accurate analytical method for identifying microscopic asbestos contamination in soils. This same analytical method was used to test a soil berm separating the polluted Johns-Manville Superfund Industrial Canal from the Federally Protected Critical Habitat and State Dedicated Nature Preserve. These berms were found to be non-asbestos containing. Yet, the Waukegan Park District risk assessment for the proposed athletic fields in 2001 used a more appropriate analytical method and found asbestos in this dirt berm. Also, the University of Illinois-Chicago tested the Waukegan Approach Channel sediments for the Illinois Attorney General in 2004 using the same analytical method selected by the Waukegan Park District. Again, the June 2005 IAG/UIC interim document reported these results and found elevated levels of microscopic asbestos were detected in the Waukegan Harbor Approach Channel, including the highly toxic tremolite asbestos.

Questions:

1. Why did the USEPA use an inferior analytical method for evaluating the presence of asbestos in the harbor sediments?
2. Did the USEPA Waukegan Harbor project manager review the interim IAG/UIC report sampling data that found elevated levels of tremolite asbestos in the approach channel sediments?
3. The analytical method specified in the USEPA harbor sediment asbestos report can use a polarized light microscope which magnifies the sediment samples approximately 400 times or use a transmission electron microscope which will magnify the sediment sample nearly 20,000 times. The USEPA testing report did not indicate which microscope was used in their testing. What microscopic technique was used for the harbor sediment testing?
4. The USEPA harbor asbestos sediment report used an unusual sample preparation technique. This preparation technique affects analytical results. Why was this sample preparation technique used prior to sample analysis?

5. Several hundred samples were taken of PCB contamination, yet only a handful of samples were taken for asbestos. Who determined how many asbestos samples were necessary to properly evaluate asbestos contamination in the harbor and what was this decision based upon?
6. There is no report indicating whether asbestos contamination was measured at various depths in the harbor sediments. It would appear asbestos contamination would be on the surface of the lake bottom. Was sampling for asbestos in the harbor performed at different depths or was potential surface contamination diluted with several feet of harbor sediments below the sediment surface?
7. The sample preparation filtered out larger particles and chunks of debris. Were these visible debris materials found in harbor sediments tested for the presence of asbestos since my findings of friable asbestos debris on the Waukegan shoreline in June, 2005?
8. Why wouldn't the USEPA use the more precise analytical technique for identifying asbestos contamination in the harbor sediments as was used by the Waukegan Park District and in the recent IAG/UIC interim study of the approach channel sediments?
9. Levels establishing contamination are usually defined prior to testing for the presence of contamination in a material. What levels of microscopic asbestos contamination of harbor sediments would be considered contaminated by the USEPA on this project and why?

Johns-Manville Remediation Presentation

The JM presentation was cut short due to the fact that the original presenter Denny Clinton was suddenly not available. There were several questions from the audience that were not answered by the only available Johns-Manville representative at the CAG meeting. However, the Johns-Manville representative did quickly summarize the installation of a new top side liner that was being placed over the settling basin. This settling basin will never have a protective liner installed beneath the highly-contaminated pollution that will be hidden below the new Johns-Manville liner discussed at the CAG meeting.

Comments and questions:

1. The new liner installed by Johns-Manville over the top of the toxic sludge within the settling basin does not line the bottom of the settling basin sludge. The new liner will be a liner for the soil cap that will be built on top of the settling basin. There is no protective liner beneath the several feet thick asbestos and chemically-contaminated jello-like sludge which lies within a foot of groundwater. What will keep the highly toxic gelatinous sludge from being compressed into the soils and groundwater once the extreme weight of the soil cap is placed on top of the cap liner?
2. The IDNR found that the proposed remediation at the Johns-Manville site would affect the hydrology in the area. There are several endangered and threatened species at the state park. What required ecological risk assessments or hydrology evaluations were made by USEPA, IEPA, IDNR, or Johns-Manville to ensure the unlined bottom of the settling basin will not further leak highly toxic pollution into the Federally Protected Critical Habitat and State Dedicated Nature Preserve of Illinois Beach State Park once the extreme weight of the soil cap is placed upon this toxic gel?
3. The USEPA has previously stated that asbestos does not travel through groundwater and therefore would not pollute outside the Johns-Manville site even if it entered the groundwater. This is a questionable theory. However, an immense downward force will be caused by the placement of the massive tonnage in the heavy soil cap when positioned upon

the highly toxic gel located within a foot of groundwater at the unlined bottom of the settling basin. Imagine this site as an uncapped tube of toothpaste turned upside down (the covered unlined settling basin) and then squeezed (by the massive weight of the topside liner).

What evaluations and safeguards were implemented to ensure the highly toxic pollution will not apparently further leak into the federal and state navigable waters of Lake Michigan when compression forces pollutants into groundwater?

4. What happens to the highly toxic sludge within the Johns-Manville settling basin if the groundwater table rises with the lake level?
5. Where will Johns-Manville place monitoring wells and how often will monitoring take place once the extreme downward compression of the highly toxic jello-like sludge in the unlined settling basin begins?
6. Are any of the above documents discussed above available at the Waukegan Library Superfund records depot?
7. If any documents are available, what are the dates these documents were produced so they can be reviewed?
8. If no documents or limited documents exist, then why is remediation moving forward at the unlined bottom of the Johns-Manville settling basin which contains highly-toxic pollution?
9. There were several questions left unasked or unanswered by audience members regarding the Johns-Manville presentation. Will USEPA and Denny Clinton or another Johns-Manville representative be available at the next CAG meeting to present documents which provide answers to these and other questions regarding the heavy cap liner that is being placed on top of the highly toxic gelatinous contamination found in the unlined bottom of the Johns-Manville settling basin?

Thank you again for allowing me to present these questions to the CAG membership. This CAG group performs an important role for public involvement on such a large and complicated environmental clean-up process. It is important that public questions and concerns are addressed in an open, honest, and transparent way. As your website states, “*CAG meetings provide a public forum for representatives from business, education, government, industry, environment, civic and recreation interests and the local citizenry to present and discuss their needs and concerns related to the decision-making process at the Waukegan Harbor AOC.*”

I look forward to responses to all of the questions and concerns itemized above. Obviously, time is of the essence.

Cordially,

Jeffery C. Camplin

Jeffery C. Camplin
1681 Verde Lane
Mundelein, IL 60060

c: Paul A. Kakuris, President, Illinois Dunesland Preservation Society