

From: [Semel, Brad](#)
To: [Veraldi, Frank M CIV \(US\)](#)
Cc: [Shawn Cirton](#); [Lah, Kristopher](#); [Cole, Maggie](#); [Byers, Steven](#); [Njapa, Valerie](#); [Semel, Brad](#); [Hayes, Bradley](#); [Louise Clemency \(louise_clemency@fws.gov\)](#)
Subject: [Non-DoD Source] RE: [EXTERNAL] Waukegan Outer Harbor - Sand Placement Assessment
Date: Sunday, August 5, 2018 10:19:59 AM

Frank,

I am writing in reference to the U.S. Army Corps of Engineers (USACE) preparation of the National Environmental Policy Act document to evaluate the removal and placement of clean littoral material (sand) from the Waukegan Outer Harbor. Although I do not have any formal comments on the dredge operation itself, I would like to comment on the placement of sand that will be removed as part of that process. As you are aware, the high water levels of Lake Michigan, combined with the loss of sand deposits in the littoral drift due to shoreline hardening, continue to exacerbate the significant erosional loss of beach and foredune habitats at Illinois Beach State Park (IBSP) and the associated North Dunes and Illinois Beach Nature Preserves. In investigating the placement of material that will be removed as part of the proposed dredging operations, I would urge you to consider the implications selection of the deposit site could have on the natural resources of this ecologically important area.

Illinois Beach State Park protects an ecosystem representing 14 different community types. The wetlands and associated upland prairie and savanna complex provides habitat for over 930 native plant species and 300 animal species, including 63 state-protected species. The site serves as important breeding habitat for many wetland-dependent birds and provides critical stop-over habitat for at least 310 migratory avian species. Because of this concentration, IBSP has been designated an Important Bird Conservation Area by the National Audubon Society. In recognition of the importance of the overall coastal landscape, in 2015 the area was designated as a Wetland of International Importance by the Ramsar Convention on Wetlands. Of national significance, IBSP provides habitat for four federally listed species, two in particular that utilize beach and foredune habitat, the Piping Plover (*Charadrius melodus*) and the Dune's Thistle (*Cirsium pitcheri*). Much of the shoreline has been officially designated by the U.S. Fish and Wildlife Service as Critical Habitat for the plover. The state-listed Blanding's (*Emydoidea blandingii*) turtle has been found to use the foredunes in which to place their nests each summer. With the continued physical loss of nearshore habitat, these species will continue to be negatively impacted and population recovery further threatened.

With nearly six miles of some of the most pristine and natural shoreline in the state of unparalleled aesthetic and biological importance, the continued movement of sand that has shaped these communities is critical for maintaining the biological values that define the landscape. State listed species that require natural shoreline processes shaping the landscape include Marram grass (*Ammophila breviligulata*), sea rocket (*Cakile edentula*) and seaside spurge (*Chamaesyce polygonifolia*), which colonize open habitat of the beach. Trailing juniper (*Juniperus horizontalis*), common juniper (*J. communis*) and bearberry (*Arctostaphylos uva-ursi*), colonize the fragile dune communities. These species are adapted to natural shifting movement of sand and require the open habitat created by it. With the significant erosion of the beach and foredunes, many pannes and interdunal wetlands also are being threatened, and with them the flora and fauna associated.

With so much at stake, I would urge you to focus the deposition of dredged materials at the northern most alternative immediately adjacent to the shore of Illinois Beach State Park.

Thank you for your time and consideration.

Brad Semel

Natural Heritage Biologist

Illinois Department of Natural Resources

8916 Wilmot Road

Spring Grove, IL 60081

630-399-3242

From: Lah, Kristopher [mailto:kristopher_lah@fws.gov]

Sent: Wednesday, August 01, 2018 2:54 PM

To: Semel, Brad; Cole, Maggie; Kath, Joe

Cc: Shawn Cirton

Subject: Fwd: [EXTERNAL] Waukegan Outer Harbor - Sand Placement Assessment

Hi Brad, Maggie, and Joe:

Please see the message and attachments below. Shawn and I discussed the project and it would appear that the project would be beneficial to the park and plover habitat if the sand is deposited on the N end of the IBSP and South of the marina. Please share your thoughts and submit comments to the Corps.

Thanks,

Kris

Kristopher Lah

Endangered Species

U.S. Fish and Wildlife Service
Chicago Ecological Services Office
230 South Dearborn St., Suite 2938

Chicago, IL 60604-1507

847-366-2347

The Endangered Species Act provides a critical safety net for fish, wildlife and plants and has prevented the extinction of 99% of the species originally listed as threatened or endangered, including hundreds of imperiled species, and has promoted the recovery of many others.

The mission of the U.S. Fish & Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

NOTE: All email correspondence and attachments received from or sent to me are subject to the Freedom of Information Act and may be disclosed to third parties.

----- Forwarded message -----

From: Cirton, Shawn <shawn_cirton@fws.gov <mailto:shawn_cirton@fws.gov> >

Date: Wed, Aug 1, 2018 at 1:46 PM

Subject: Re: [EXTERNAL] Waukegan Outer Harbor - Sand Placement Assessment

To: Kristopher Lah <kristopher_lah@fws.gov <mailto:kristopher_lah@fws.gov> >

This is the Planning project I was talking about Kris. Attached is the information for it.

Shawn Cirton

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service

Chicago Illinois Field Office

230 South Dearborn Street, Suite 2938

Chicago, IL 60604

(312)216-4728

On Fri, Jul 13, 2018 at 1:58 PM, Cirton, Shawn <shawn_cirton@fws.gov <mailto:shawn_cirton@fws.gov> > wrote:

Yes I received it and I am checking to find out if this is related to the USEPA led project that was in the same location.

Shawn Cirton

Fish and Wildlife Biologist

U.S. Fish and Wildlife Service

Chicago Illinois Field Office

230 South Dearborn Street, Suite 2938

Chicago, IL 60604

(312)216-4728

On Fri, Jul 13, 2018 at 10:02 AM, Louise Clemency <louise_clemency@fws.gov
<mailto:louise_clemency@fws.gov>> wrote:

Hi Shawn, I wanted to be sure you had received this, and to be our lead for any response. Copying Kris and Cathy so that they are aware.

Thank you,

Louise Clemency
Field Supervisor
U.S. Fish and Wildlife Service
Chicago Ecological Services Office
230 South Dearborn St., Suite 2938

Chicago, IL 60604
312-216-4733

louise_clemency@fws.gov <mailto:louise_clemency@fws.gov>

NOTE: All email correspondence and attachments received from or sent to me are subject to the Freedom of Information Act and may be disclosed to third parties.

----- Forwarded message -----

From: Veraldi, Frank M CIV (US) <Frank.M.Veraldi@usace.army.mil <<mailto:Frank.M.Veraldi@usace.army.mil>>>
>

Date: Thu, Jul 12, 2018 at 2:55 PM

Subject: [EXTERNAL] Waukegan Outer Harbor - Sand Placement Assessment

To: westlake.kenneth@epa.gov <<mailto:westlake.kenneth@epa.gov>> <westlake.kenneth@epa.gov
<<mailto:westlake.kenneth@epa.gov>> >, Pelloso, Elizabeth <Pelloso.Elizabeth@epa.gov
<<mailto:Pelloso.Elizabeth@epa.gov>> >, Clemency, Louise <Louise_Clemency@fws.gov
<mailto:Louise_Clemency@fws.gov> >, shawn_cirton@fws.gov <mailto:shawn_cirton@fws.gov>
<shawn_cirton@fws.gov <mailto:shawn_cirton@fws.gov> >, Adam Rawe <Adam.Rawe@illinois.gov
<<mailto:Adam.Rawe@illinois.gov>> >, Shank, Keith <Keith.Shank@illinois.gov
<<mailto:Keith.Shank@illinois.gov>> >, Santucci, Vic <Vic.Santucci@illinois.gov
<<mailto:Vic.Santucci@illinois.gov>> >, Casey, James <James.Casey@illinois.gov
<<mailto:James.Casey@illinois.gov>> >, Phillippe, Joe <Joe.Phillippe@illinois.gov
<<mailto:Joe.Phillippe@illinois.gov>> >

Cc: Dove, Margaret A CIV USARMY CELRC (US) <Margaret.A.Dove@usace.army.mil
<<mailto:Margaret.A.Dove@usace.army.mil>> >, Veraldi, Frank M CIV (US) <Frank.M.Veraldi@usace.army.mil
<<mailto:Frank.M.Veraldi@usace.army.mil>> >

Coordinating Agencies,

The scoping period for proposed changes to the Waukegan Outer Harbor sand placement activities associated with maintaining navigation functionality of the harbor has started. Please provide your responses NLT 13 August 2018. The Draft Environmental Assessment would be released shortly thereafter.

Cheers,

Frank Veraldi, PM-PL-E
Ecosystem Restoration Formulation,
LRD Regional Technical Specialist USACE
231 S. LaSalle St, Suite 1500
Chicago, Illinois 60604

Office: 312-846-5589
Blocked<http://www.lrd.usace.army.mil>
Blocked<http://www.lrc.usace.army.mil>
FACEBOOK: Blocked<http://www.facebook.com/usacechicago>

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From: [Rawe, Adam](#)
To: [Veraldi, Frank M CIV \(US\)](#)
Cc: [Byers, Steven](#)
Subject: [Non-DoD Source] RE: Waukegan Outer Harbor - Sand Placement Assessment
Date: Thursday, August 9, 2018 3:07:52 PM

Frank,

I have reached out to our Fisheries Division for comment and didn't hear back. A reminder email was sent requesting any comments.

Also, I included Steve Byers with the Nature Preserves Commission since the optional placement area appears to be near the boundary of North Dunes Nature Preserve. Steve, please let me know if you plan to comment or if you will comment directly to Frank.

Another concern of mine is placement of dredged sand on nearby municipal beaches. We do show state-listed plant records. If the municipal beaches will be identified in the draft NEPA document, I can wait and provide comments at a later date?

Thanks
Adam

-----Original Message-----

From: Veraldi, Frank M CIV (US) <Frank.M.Veraldi@usace.army.mil>
Sent: Thursday, July 12, 2018 2:49 PM
To: westlake.kenneth@epa.gov; Pelloso, Elizabeth <Pelloso.Elizabeth@epa.gov>; Clemency, Louise <Louise_Clemency@fws.gov>; shawn_cirton@fws.gov; Rawe, Adam <Adam.Rawe@illinois.gov>; Shank, Keith <Keith.Shank@Illinois.gov>; Santucci, Vic <Vic.Santucci@Illinois.gov>; Casey, James <James.Casey@Illinois.gov>; Phillippe, Joe <Joe.Phillippe@Illinois.gov>
Cc: Dove, Margaret A CIV USARMY CELRC (US) <Margaret.A.Dove@usace.army.mil>; Veraldi, Frank M CIV (US) <Frank.M.Veraldi@usace.army.mil>
Subject: [External] Waukegan Outer Harbor - Sand Placement Assessment

Coordinating Agencies,

The scoping period for proposed changes to the Waukegan Outer Harbor sand placement activities associated with maintaining navigation functionality of the harbor has started. Please provide your responses NLT 13 August 2018. The Draft Environmental Assessment would be released shortly thereafter.

Cheers,

Frank Veraldi, PM-PL-E
Ecosystem Restoration Formulation,
LRD Regional Technical Specialist USACE
231 S. LaSalle St, Suite 1500
Chicago, Illinois 60604

Office: 312-846-5589
Blocked<http://www.lrd.usace.army.mil>
Blocked<http://www.lrc.usace.army.mil>
FACEBOOK: Blocked<http://www.facebook.com/usacechicago>

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Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 • Fax: (918) 542-7260
www.miamination.com



August 6, 2018

Mr. Frank Veraldi
U.S. Army Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, IL 60604

Re: Waukegan Outer Harbor – Comments of the Miami Tribe of Oklahoma

Dear Mr. Veraldi:

Aya, kikwehsitoole – I show you respect. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

The Miami Tribe offers no objection to the above-mentioned project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter
Tribal Historic Preservation Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

1 AUG 09 2018

REPLY TO THE ATTENTION OF:

Frank Veraldi
U.S. Army Corps of Engineers
231 South La Salle Street, Suite 1500
Chicago, Illinois 60604

Re: Request for Scoping Comments for the Waukegan Outer Harbor Maintenance
Dredging and Sand Placement Project, City of Waukegan, Cook County, Illinois

Dear Mr. Veraldi:

The U.S. Environmental Protection Agency has received the U.S. Army Corps of Engineers' (USACE) July 12, 2018 request for scoping comments on the project referenced above. This letter provides EPA's scoping comments to inform USACE's upcoming environmental document, pursuant to our authorities under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

USACE's letter to EPA states that the environmental document will: (1) assess dredging sandy material from the Waukegan Outer Harbor and placing it at the current in-lake placement areas, (2) investigate placing materials at nearby municipal beaches, and (3) assess changing the current open lake deep placement area to allow for an adjustable placement depending on Lake Michigan water levels.

Superfund Site and Area of Concern

EPA is particularly concerned with this area because the 100-acre Outboard Marine Corporation Superfund Site is in the northern section of Waukegan Harbor along the shore of Lake Michigan. In the environmental document, we recommend that USACE fully describe the relationship between the proposed project and the Superfund Site. Consider any potential impacts from project activities on site contamination, exposure pathways, monitoring, and remediation activities. For questions regarding the Superfund Site, contact Sarah Rolfes at 312-886-6551 or rolfes.sarah@epa.gov.

The Waukegan Harbor area is also designated as an Area of Concern under the U.S. - Canada Great Lakes Water Quality Agreement. We recommend that USACE fully describe the relationship between the proposed project and the Area of Concern. Ensure that the proposed project would not hinder efforts to restore the Waukegan Harbor area. For questions regarding the Area of Concern, contact Nick Green at 312-353-3718 or nicholas.green@epa.gov.

Sediment Testing

EPA recommends that the environmental document include information on the types of sediment testing that have been, or will be, instituted for the proposed dredging area. We also recommend including available test results. Since USACE is considering reuse of dredged materials as beach nourishment, we recommend providing information to demonstrate that such an application would be safe.

Beneficial Reuse

In addition to beach nourishment, EPA recommends that USACE consider whether other beneficial reuse opportunities may be appropriate. Opportunities include restoring aquatic habitat areas, covering over brownfields locations, filling in basements of demolished buildings, use by the fracking or mining industries, use by the Department of Transportation, and use by counties or local communities as general fill or for winter road maintenance.

To promote reuse, a solid understanding of the materials is necessary. If materials are safe for reuse, we recommend developing material specification sheets that describe, at a minimum: physical properties, chemical properties, amount available, and estimated times that the material will be available. This information would allow interested users to more easily determine whether the material can meet their needs.

Erosion, Habitat and Bathymetry

We recommend that USACE fully analyze and disclose potential erosion impacts to nearby dune and swale habitat, current bathymetry, and impacts to current shallow water habitat. Include measures to avoid, minimize and mitigate impacts.

Air Quality

EPA recommends that the environmental document discuss existing air quality conditions in the project area as well as air quality impacts that could result from this project. Consider the recommendations in the enclosed Construction Emissions Control Checklist for activities using diesel engines, including material hauling and site preparation work.

Public Outreach

EPA is aware of the strong local interest in activities at the Waukegan Harbor. We encourage USACE to seek input from local citizen advocacy groups, the public, and the City of Waukegan, and to use such input to inform decision-making. We recommend summarizing outreach in the environmental document.

Threatened and Endangered Species

We recommend that, before plans are finalized, USACE coordinate with the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources to ensure any proposed work will not harm any federal or state endangered or threatened species or critical habitat. Document coordination and describe potential impacts in the environmental document.

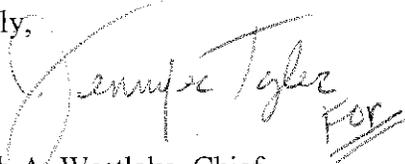
Project Description

EPA recommends that the environmental document fully describe the proposed project, including: the proposed depth of dredging, dredging schedule (timing and frequency), proposed

dredging methods (mechanical or hydraulic), contaminant and nutrient levels, proposed methods for transporting dredged materials and proposed placement/disposal location(s). In addition, consider how dredged materials would be contained during transport and final disposal.

Thank you for the opportunity to provide early input. If you would like to discuss our comments, please contact Jennifer Tyler of my staff at 312-886-6394 or tyler.jennifer@epa.gov. Please provide future environmental documents prepared under NEPA for this project electronically to Ms. Tyler.

Sincerely,

Handwritten signature of Jennifer Tyler in cursive, with the word "For" written below it.

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: EPA's Construction Emission Control Checklist

U.S. Environmental Protection Agency
Construction Emission Control Checklist

Consider applicable measures from the following list.

Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).¹
- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).²
- Marine Vessels: Marine vessels hauling materials for infrastructure projects should meet, or exceed, the latest U.S. EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).³
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Repower older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.).

¹ <http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>

² <http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm>

³ <http://www.epa.gov/otaq/standards/nonroad/marineci.htm>

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Occupational Health

- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.



United States Department of the Interior



US FISH AND WILDLIFE SERVICE REGION 3

Chicago Ecological Services Field Office

230 South Dearborn Street, Suite 2938

Chicago, IL 60604

Phone: (312) 216-4722

IN REPLY REFER TO:
FWS/AES-CIFO

August 13, 2018

Col. Aaron W. Reisinger
District Engineer
U.S. Army Corps of Engineers
Chicago District
231 S. LaSalle Street, Suite 1500
Chicago, Illinois 60604

Attention: Frank Veraldi

Dear Colonel Reisinger:

This letter responds to your request for scoping comments to evaluate the removal and placement of clean littoral material (sand) from the Waukegan Outer Harbor in Waukegan, Lake County, Illinois. The District's National Environmental Policy Act (NEPA) document will assess: 1) the dredging of sand from the Waukegan Outer Harbor and placing it at the current in-lake placement areas, 2) investigating the placement of materials at municipal beaches near Waukegan Outer Harbor, and 3) changing the current open lake deep placement area to allow an adjustable placement (east and west) depending on Lake Michigan water levels. A figure on the Waukegan Harbor Approach Maintenance Dredging FY 2017 plan sheet, that accompanied the scoping request, identified two alternatives including an "Optional Placement Area."

We provide general comments as they relate to U.S. Fish and Wildlife Service (Service) trust resources (*e.g.*, Federally listed species, interjurisdictional fish, and migratory birds) that may be affected by the project. We recommend that the draft NEPA document fully address the concerns identified in this letter.

General comments

The draft NEPA document should fully disclose potential impacts to Service trust resources and aquatic resources found in the project vicinity.

Federally listed species

Federally listed species known to occur in the project area include the rufa red knot (*Calidris canutus rufa*), Pitcher's thistle (*Cirsium pitcher*), and piping plover (*Charadrius melodus*). Critical habitat for the Federally endangered piping plover is found along the shoreline in the project area (<https://www.fws.gov/midwest/endangered/pipingplover/pdf/pip1CHinILandIN.pdf>). Information about Federally listed species can be found on the Service's Region 3 Section 7 webpage, (<https://www.fws.gov/midwest/endangered/>) or IPaC (<https://ecos.fws.gov/ipac/>) to assist the District in determining if listed species in the project area could be impacted by the proposed project.

The draft NEPA document should consider potential beneficial or adverse impacts to listed species from selecting to use, or to not use, each potential sand placement area. In particular, the document should evaluate the potential benefits of selecting the "Optional Placement Area," at the northern section of Illinois Beach State Park (IBSP) and south of Winthrop Harbor, to the piping plover, the Pitcher's thistle, and the rufa red knot.

Thank you for the opportunity to provide comments. This letter provides comment under the authority of, and in accordance with, the provisions of the National Environmental Policy Act of 1969 (83 Stat. 852, as amended P.L. 91-190, 42 U.S.C. 4321 et seq.), the Fish and Wildlife Coordination Act of 1956 (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). If you have any questions, please contact Mr. Shawn Cirton at (312) 216-4728.

Sincerely,



Louise Clemency
Field Supervisor

Cc: USEPA, Pelloso
USACOE, Chernich
IDNR, Semel, Grider



Illinois Department of Natural Resources

JB Pritzker, Governor
Colleen Callahan, Director

www.dnr.illinois.gov

Mailing address: State Historic Preservation Office, 1 Old State Capitol Plaza, Springfield, IL 62701

Lake County
Waukegan
Lake Michigan - NE of E. Water St. & State Route 137
COEC-CELRC-PMD-EF
Maintenance dredging & placement - Waukegan Harbor

PLEASE REFER TO: SHPO LOG #006071119

July 26, 2019

John Belcik
U.S. Army Corps of Engineers, Chicago District
231 S. LaSalle St., Suite 1500
Chicago, IL 60604

Dear Mr. Belcik:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance. If further assistance is needed contact Jeff Kruchten, Chief Archaeologist at 217/785-1279 or Jeffery.kruchten@illinois.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert F. Appleman".

Robert F. Appleman
Deputy State Historic
Preservation Officer

2018-CPA-0115



DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

June 28, 2019

NO OBJECTION

U.S. Fish & Wildlife Services
Chicago Illinois Field Office

Andy Thomas Carter 7-26-19
Supervisor Date

CELRC-PMD-EF

RECEIVED
7-2-19

Dear Recipient:

The U.S. Army Corps of Engineers, Chicago District, has prepared a draft Environmental Assessment (EA) titled, Waukegan Harbor Maintenance Dredging and Placement. The EA evaluates the potential effects of dredging clean littoral sand from the outer harbor, approach channel and advanced maintenance dredging area at Waukegan, Illinois with its placement in a variety of locations on or along the Lake Michigan Shoreline near Waukegan, Illinois. As part of the 30-day agency and public review period, the Chicago District would appreciate any comments or concerns you might have associated with this work. Comments could be made on any potential environmental effects of the Waukegan Harbor dredging from the outer harbor, approach channel and advanced maintenance dredging area and its placement along the Lake Michigan Shoreline. This document is available at:

<https://www.lrc.usace.army.mil/Missions/Civil-Works-Projects/>

It is located under "Projects in Alphabetical Order", Waukegan Harbor Maintenance Dredging and Placement on the Civil Works Project Page.

A draft Finding of No Significant Impact (FONSI) along with the Section 404(b)(1) evaluation for the dredging and placement of material into the waters of the United States has been prepared to accompany the draft EA. The draft FONSI concludes that implementing the maintenance dredging from the outer harbor, approach channel and advanced maintenance dredging area and its placement on or along the Lake Michigan Shoreline does not constitute a major Federal action that significantly affects the quality of the human environment. Any comments you may have concerning the proposed project should be made within thirty (30) days from the date of receipt, but not later than 31 July 2019. Please direct your comments to: ATTN: CELRC-PMD-EF (John Belcik) at the address located at the top of this notice or by email to John.T.Belcik@usace.army.mil.

Any person who has an interest that may be affected by the dredging of the clean sand from the outer harbor, approach channel and advanced maintenance dredging area at Waukegan Harbor area and the placement on or along the Lake Michigan Shoreline may request a public hearing. To be considered, the request must be submitted in writing to the contact provided above within the comment period of this notice. The request must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.



Waukegan Harbor Citizens Advisory Group

*P.O. Box 297
Waukegan, Illinois 60079*

August 20, 2019

Attention: CLERC-PDM-EF- John Belcik
Department of the Army
Chicago District, U.S. Army Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

Dear Mr. Belcik,

Thank you very much for the opportunity to respond to the letter sent by Susanne J. Davis, P.E. Chief, Planning Branch of the Chicago District, U.S. Army Corps of Engineers on July 18, 2019 regarding placement of sand on or along the Lake Michigan Shoreline from the dredging of the clean sand taken from the Approach Channel, Outer Harbor and Advanced Maintenance Dredging Area of Waukegan Harbor.

The Waukegan Harbor Citizens' Advisory Group attended the public presentation of your Waukegan Harbor Maintenance Dredging and Sand Placement Plan held in mid-July, 2019 at the Evanston Environmental Center along with many members of the communities on the Lake Michigan shoreline south of Waukegan. A full and robust discussion of the presentation information provided at that meeting by the U. S. Army Corps of Engineers and the Illinois Department of Natural Resources Coastal Zone Division was then held at the July 18, 2019 Waukegan Harbor Citizens' Advisory Group meeting.

We have always been most supportive of the USACE creating a long term Waukegan Harbor Maintenance Dredging plan for Waukegan Harbor, and we fully understand the specific areas of the harbor currently under dredging consideration. We are completely knowledgeable of the previous sediment contamination in Waukegan Harbor. This was thoroughly documented in the 1990's and further documented from 2000 through 2014 at which time the PCB's were properly removed and contained under 1.) OMC's early 1992-1994 PCB dredging, and 2.) the final big full harbor contamination PCB removal under the USEPA Superfund program.

Environmental Impact Assessments are incredibly important to the general public who cannot be expected to follow three decades of Waukegan Harbor Area of Concern and Extended Area of Concern in monthly detail from all the agencies and parties involved in the cleanup and restoration. The problem is the general public in the downshore communities under consideration for sand placement deserve to have a full and clear brief summary of the Waukegan Harbor Area of Concern work completed to date, properly detailed maps of identifying each of the areas of Waukegan Harbor and one map showing exactly which of the harbor areas were addressed in the full contamination cleanup. They have a right to a full and clear updated Environmental Assessment of your currently proposed project. As policy it is most unfortunate to forego Environmental Assessments of current proposed projects. It sets up a pattern allowing Principle Responsible Parties (PRP's) to disregard Environmental Assessments when known contaminants have been documented and removed from adjacent properties. There is then no study for the general public to indicate if a plume has extended into coterminous areas thus setting a very bad public standard. The PRP's may choose not to bother with site cleanup before going forward with future development if Environmental Assessments are not completed.

We respectfully request that the U.S. Army Corps of Engineers hold at least three further public meetings for the general public in each of the areas where sand placement is proposed will address the issues raised at your one July meeting in Evanston, and which were definitely not answered after the presentations were completed. You will gain a great deal more public trust if you take the time to have the follow up meetings. Your areas under consideration for sand placement downshore of Waukegan Harbor are too far apart for concerned members of the general public to easily attend. Further, they are all interested in their own public properties under consideration. North Chicago and Lake Bluff could

DREDGE DEEPEN DELIST



Waukegan Harbor Citizens Advisory Group

*P.O. Box 297
Waukegan, Illinois 60079*

perhaps be blended into one meeting, and Glencoe and Evanston should each have their own meetings due to their positions on the shoreline. We would be glad to help facilitate the above meetings, and to provide the simple clear maps which worked well all through the Waukegan Harbor AOC cleanup.

We would suggest the following be included in the proposed follow up meetings:

- All riparian property owners should have an opportunity to hear your plans for their communities and be able to ask questions of you themselves. There is very, very little communication between the local Village Public Works Departments and Park District staff on the meetings you have been holding while studying sand management options for the proposed dredging of the Waukegan Approach Channel, Outer Harbor and Advanced Maintenance Dredging Area. Residents want to hear directly from you, and they wish to share with you their own property concerns. It is their taxes which provide the funding for this project.
- Use the two maps which worked very well for the USACE, the USEPA, the IEPA and the Waukegan Harbor Citizens' Advisory Group at countless meetings to show the exact sections of Waukegan Harbor, and the map showing the corresponding areas which were contaminated and then dredged during the cleanup of the harbor.
- Provide dates in which the USACE tested the sand in the current proposed areas to be dredged, and the simple concise results of the testing.
- Clearly state that the continued tests show no PCB contamination of the sand proposed to be moved to sites further south of Waukegan Harbor. Clarify if you intend to do further testing just prior to dredging.
- There is also the concern that the current high water levels and numerous heavy storms will take quickly take away the "new" sand shortly following your initial beach nourishment placement onto their public beaches. This has occurred recently.
- There is no present data indicating how long water levels will remain at high, nor how rapidly the very low water levels will return. The local cost of \$25,000. of tax payer money may be quickly lost as Mother Nature erodes the newly placed sand due to frequent high impact storms.
- The federal costs of placement of the sand on shore also may be quickly lost as Mother Nature erodes the newly placed sand due to frequent high impact storms.
- Discussion of inlake placement of the dredged sand south of Naval Station Great Lakes should be included to make sure it does not recirculate in nearshore currents from Sand Mountain to clog the Waukegan Recreational Harbor entrance. This should be cost effective as the sand will be in the littoral drift and will nourish some of the beaches to the south of Naval Station Great Lakes.
- At the proposed local meetings provide an additional USACE staff member who was present and has a full history on being on site with the previous work done by the USACE and its partners. Your staff member was at a distinct disadvantage in being relatively new to Lake Michigan issues.

We are all in this together, and we very much appreciate your thoughtful consideration of working further with the public in the communities being served by your Sand Management proposal. The public relations garnered will benefit the entire project and be respectful of all the taxpayers involved.

Cordially,

Jean B. Schreiber – "Susie"
Chair

DREDGE DEEPEN DELIST

From: [William Vignocchi](#)
To: info@lakebluffparks.org; [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Beneficial Use of Dredged Materials - North Shore
Date: Tuesday, August 13, 2019 10:37:23 AM

As a resident of the North Shore and one that frequents many of our beaches, I am writing to express my absolute support for your plans to reuse dredged materials from Waukegan Harbor at the public beaches located in North Chicago, Lake Bluff, Glencoe, and Evanston.

Each year our communities are burdened with spending our tax dollars on "re-nourishing" the beaches with sand so that we can enjoy this great asset. While ultimately necessary, the amount of community money allocated to these effort is not enough to make a substantial difference (last year Lake Bluff imported approximately 160 cubic yards). Furthermore, the record lake levels has exacerbated continual lakefront erosion with no end in sight.

The reuse and distribution of 71,000 cubic yards annually will make a substantial difference and benefit all North Shore communities. The program represents a "win-win" for Waukegan, the North Shore, all of the tax payers, and I extend my full support.

Thank you,

Bill Vignocchi
Lake Forest, Illinois

From: [Joshua Fox](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Lake Bluff Sand Beach Project
Date: Wednesday, August 7, 2019 10:43:52 PM

Bring it ON! I'm all for it, this sounds like a great idea.

I am a resident of Lake Bluff, a regular beach goer. I trust the sand will be ok, this is a great solution, I hope this passes!

I live at 231 E North Ave Lake Bluff, IL

Joshua Fox
847-902-9029

From: [Kris Heiar Newman](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Replace sand and combat erosion
Date: Monday, August 5, 2019 3:53:55 PM

Hi John,
My thoughts are to go ahead with the waterfront beach restoration project provided it's not going to be at a cost prohibitive price point.
Thank you,
Kris H. Newman

Sent from my iPhone

Belcik, John T CIV USARMY CELRC (USA)

From: Hugh Mazza <hugh@mazzaemail.com>
Sent: Saturday, August 3, 2019 2:49 PM
To: Belcik, John T CIV USARMY CELRC (USA)
Subject: [Non-DoD Source]

Appears sand is tested, ok and appropriate for adding to, extending or otherwise usable for Mich. beaches. Support use of , repurposing existing resources whenever possible.

From HJM phone

From: [Michael Lavelle](#)
To: [Belcik, John T CIV USARMY G14BC USA](#)
Cc: ["Michael Lavelle" <lavelle_m@usac>](#); [emily.selbe@usace](#); [sac@officeoflakebluffparkdistrict.org](#); ["Congressman Brad Schneider"](#); ["Deva Ivin"](#); ["Deb Percec"](#)
Subject: [Non-DOD Source] Lake Bluff Sunrise Beach Pilot Project Sand Replenishment Information Request
Date: Saturday, August 3, 2019 12:31:45 AM

Mr. Belcik,

I am a resident of Lake Bluff. I am writing you regarding the Sunrise Beach Pilot Project Sand Replenishment project.

My wife Emily is the current Head Trustee of Grace United Methodist Church in Lake Bluff. I have served in that position between 2014 and 2017, and am a current Trustee of our congregation. We both play in our congregation's Bell Choir. We also sing in our Chancel Choir, which Emily's mother, Mary Reusche, sang in for 50 years.

I welcome the U.S. Army Corps of Engineers leadership of the Sunrise Beach Pilot Project Sand Replenishment project.

I have a few questions on details of the plan.

At the foundation of the plan must be measurements, observations, and modelling of the seasonal lake water level, wave action, and erosion patterns, and sand volume displacement for the Great Lakes in general, and south west shores of Lake Michigan.

What is the beginning and end of the 31 miles of shoreline considered in this project?

Please describe the current state of this shoreline.

Context is needed. Is there a "normal" state for this stretch of shoreline?

Given a 10-, 20- and 50-year window, what are the expectations for this 31 mile shoreline without intervention.

How will this intervention improve expectations for this shoreline in the same future 10-, 20- and 50-year windows?

Does the U.S. Army Corps of Engineers believe this intervention is sustainable? If not sustainable, when will the next remediation be expected?

Waukegan harbor has been used as a commercial port and site of heavy industrial usage for over a century. Human activity has introduced hazardous materials (HazMat) into the water column and onto the sand/rock floor of the harbor over this time. Dredged material from this area is offered for this project.

What is the protocol for testing the dredged material for hazards?

What tests will be used? What is the frequency of spot testing?

What is the frequency of broad spectrum testing?

How many bore holes in the dredge site have been made and tested? What are those tests?

How expensive are the spot tests? How expensive are the broad spectrum tests?

What hazardous wastes are known to exist in the dredged material?

What are the 2016 U.S.EPA standards for these known hazards?

If hazardous wastes are found, there is a sliding scale to how that material is responded to, based on the abundance of HazMat found. What are the HazMat response protocols? What are 2016 U.S.EPA standard protocols for these hazards?

What volume of material is sand on the beach?

What volume of material is dredged rocks and other material to be put in place farther from the shore to protect the shoreline itself?

If permissions are granted for all 31 miles of shoreline protections on a given date, how long will the project be physically active from first dredge in Waukegan Harbor, to last sand/rock load dropped? Please answer in number of months, end-to-end; not months of activity.

Are all physical resources needed available within a 500 mile radius on the Great Lakes or adjacent river systems?

What dredges, barges, tugs, piling hammers, and other physical resources must be acquired from remote sources or built?

Please direct me to documentation on similar projects the U.S. Army Corps of Engineers has conducted in fresh and salt water environments.

I appreciate your time in responding to this inquiry.

Here is the [text only] communication that the Lake Bluff Park District sent out to Lake Bluff residents:

Sunrise Beach Pilot Project Sand Replenishment

Your Comments are Needed!

Lake Bluff Beach is part of a new pilot program to replace sand and combat erosion. It involves using dredged material from the Waukegan Harbor to protect 54,560 yards of shoreline at six sites including Sunrise Beach. We need your comments! The U.S. Army Corps of Engineers has a 30-day comment period and wants your opinion of the plan. For more information about the project, click here [Blockcdhttp://z20.rs6.net/n.jsp?F=001puTwsjTWHPXCCbbFKg03Ehr1uT49NCsY/TmWD9E9cLFjwly-YEhNtEjQTIMMaCnCWeb31QcYtW2_BZTAkUYWUfvuyqLqzVvXZQDOU90RTPDQRKGG2Aedw49raW7VrxJXWpTT_wthi98ivOwhb7jD1WHhniS5jips9L1xVd_eQoz2r8miCFHhYAM9NmMBh2YQppd1TMOg7Q1WMMflzKly5007xq3LPSaNag-4c=GRdZfSkTjg9GOTXy3J0RC7gY13AQFY7n8eygcXZ0S1-2dkSkAw---4cb-QGLdXcMyc7hm_57og8F10CW3BSpq20UZ701YF145j4X9qMA--->](#)

Please direct your comments by email to John Belcik, at john.t.belcik@usace.army.mil <<mailto:john.t.belcik@usace.army.mil>>

Michael F Lavelle and Emily Selbe

764 Oak Ave, Lake Bluff, IL 60044

Cell 847-553-5158 (Mike)

Work 224-667-1195 (Mike)

Cell 847-361-4332 (Emily)

From: [Steve Huisel](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: Re: [Non-DoD Source] Lake Bluff Project
Date: Tuesday, August 13, 2019 1:09:13 PM

Thanks John for the follow up. The rocks I was talking about were the amount of rocks in the shallow swimming area, not by the north and south end. If the beach is extended, that should help w that problem. Really looking forward to this project becoming a reality!

Thanks
Steve

Sent from my iPhone

> On Aug 13, 2019, at 7:07 AM, Belcik, John T CIV USARMY CELRC (USA) <John.T.Belcik@usace.army.mil> wrote:

>

> Good Morning Mr. Huisel,

>

> Thank you for your questions. One of the goals would be to expand the beach, by how much is dependent on how much material the city would request and how much is actually available. Also, where it would be placed would be addressed during the design and feasibility processes. Likely, the priority placement areas would be on existing public beaches, and likely in areas that have been maintained in the past, mostly on or near the shoreline. As far as the rocks go, I think you're talking about the rock groins that are along the northern and southern sections of the beach. I believe those are there as a form of beach armoring to prevent further erosion of the beach and would likely not be covered with sand, as it would likely get immediately washed away by wave action. But that would be something that would be looked into during the design phase to see if makes sense to do or not to do.

>

> Hope those answered your questions and thank you for your interest.

>

> Best Fishes,

>

> John T. Belcik

>

> United States Army Corps of Engineers

> Biologist and Planner, Chicago District

> 231 S. LaSalle St, Suite 1500

> Chicago, IL 60604

> Office: 312-846-5595

> Mobile: 773-497-1279

> Fax: 312-886-2891

>

> PhD Candidate

> University of IL at Chicago - Ashley Lab

>

> CHICAGO USACE WEB SITE: Blocked<http://www.lrc.usace.army.mil>

> FACEBOOK: Blocked<http://www.facebook.com/usacechicago>

>

> -----Original Message-----

> From: Steve Huisel [<mailto:shuisel@gmail.com>]

> Sent: Friday, August 9, 2019 11:17 PM

> To: Belcik, John T CIV USARMY CELRC (USA) <John.T.Belcik@usace.army.mil>

> Subject: [Non-DoD Source] Lake Bluff Project

>

> Hi John

>

> I saw in our monthly newsletter that all questions regarding the beach project that you were the guy. Would the additional sand that would be brought in cover most of the rocks and extend the beach at all? Im assumin thats what this would do, making it a more desireable beach, but wanted to confirm.

>

> Thanks

> Steve Huisel

>

> Sent from my iPhone

From: [Shanks, Matthew R CIV USARMY CELRC \(USA\)](#)
To: pakcoastal@aol.com; [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Cc: [Davis, Susanne J CIV USARMY CELRC \(USA\)](#)
Subject: RE: [Non-DoD Source] Questions about Public Notice CELRC-PMD-EF (UNCLASSIFIED)
Date: Monday, August 19, 2019 1:53:45 PM

CLASSIFICATION: UNCLASSIFIED

Good Morning Mr. Kakuris,

We have added a couple documents to the website to include the 401 permit along with the first year monitoring report for dredging operations. You can find them here:

<https://www.lrc.usace.army.mil/Missions/Civil-Works-Projects/Waukegan-Harbor-Dredging/>

We appreciate your interest in the project and look forward to hearing your feedback to the EA.

Thank you,

Matthew Shanks
Deputy Chief, Planning Branch
Planner / Fish Biologist
Chicago District
231 S. LaSalle St. Suite 1500
Chicago, IL 60604
Office: 312-846-5581
Mobile: 312-806-3760

-----Original Message-----

From: pakcoastal@aol.com [<mailto:pakcoastal@aol.com>]
Sent: Friday, August 16, 2019 12:11 PM
To: Belcik, John T CIV USARMY CELRC (USA) <John.T.Belcik@usace.army.mil>; Shanks, Matthew R CIV USARMY CELRC (USA) <Matthew.R.Shanks@usace.army.mil>
Cc: Shanks, Matthew R CIV USARMY CELRC (USA) <Matthew.R.Shanks@usace.army.mil>
Subject: [Non-DoD Source] Questions about Public Notice CELRC-PMD-EF

From: pakcoastal@aol.com
To: John.T.Belcik@usace.army.mil
Sent: 8/16/2019 11:47:13 AM Central Standard Time
Subject:

John, Matt

Questions about Public Notice CELRC-PMD-EF
RE: Waukegan Harbor dredging from the outer harbor, approach channel and advanced maintenance dredging area and its placement along the Lake Michigan Shoreline.
We need this information ASAP for making timely Public Comments; there is a reference but cannot find the data.

1. Looking for the current IEPA dredge permit sampling/testing requirements for testing Waukegan Harbor

sediments that is required before USACE can dredge.

2. Also looking for the test reports that show they complied with that requirement prior to dredging.

Thanks
Paul Kakuris
312 371 9770

CLASSIFICATION: UNCLASSIFIED

From: [Shanks, Matthew R CIV USARMY CELRC \(USA\)](#)
To: pakcoastal@aol.com; [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Cc: [Davis, Susanne J CIV USARMY CELRC \(USA\)](#); [Fleming, Eugene J CIV USARMY CELRC \(USA\)](#); [Frank, Carin J CIV USARMY CELRC \(USA\)](#); [Jerbi, Kevin J CIV USARMY CELRC \(US\)](#)
Subject: RE: [Non-DoD Source] Request For Missing Information on USACE Public Website Re: Waukegan Harbor Dredging and Extension of Public Notice Response Time (UNCLASSIFIED)
Date: Tuesday, August 20, 2019 2:42:44 PM

CLASSIFICATION: UNCLASSIFIED

Thank you for your continued interest Mr. Kakuris. We appreciate your concerns for public safety and will begin processing your request for the information through the formal Freedom of Information Act procedures. Your inquiry has been transmitted to our office of counsel for further action and they will reach out to you with further instruction and updates. The Outer Harbor Contaminant Determination report that you have referenced and requested further information on relays information on sediment that has already been dredged from the area. That sediment was placed upland at an appropriate facility in compliance with the permit covering that work. The 2006 report and its findings are not representative of the existing shoaled sediment in the Outer Harbor today. We believe there is sufficient data and supportive documentation provided on the website currently to inform both agency and public review of the proposed future dredging as well as characterization of the existing conditions. For these reasons we have made the determination to maintain the current deadline for comments to the June 27, 2019 Waukegan Harbor Maintenance Dredging and Placement Draft Environmental Assessment. We look forward to receiving your comments to this project and will work towards addressing your request for information regarding the 2006 Outer Harbor Contaminant Determination Report.

Respectfully,

Matthew Shanks
Deputy Chief, Planning Branch
Planner / Fish Biologist
Chicago District
231 S. LaSalle St. Suite 1500
Chicago, IL 60604
Office: 312-846-5581
Mobile: 312-806-3760

-----Original Message-----

From: pakcoastal@aol.com [<mailto:pakcoastal@aol.com>]
Sent: Tuesday, August 20, 2019 11:17 AM
To: Shanks, Matthew R CIV USARMY CELRC (USA) <Matthew.R.Shanks@usace.army.mil>; Belcik, John T CIV USARMY CELRC (USA) <John.T.Belcik@usace.army.mil>
Cc: Davis, Susanne J CIV USARMY CELRC (USA) <Susanne.J.Davis@usace.army.mil>
Subject: [Non-DoD Source] Request For Missing Information on USACE Public Website Re: Waukegan Harbor Dredging and Extension of Public Notice Response Time

Request For Missing Information on USACE Public Website Re: Waukegan Harbor Dredging and Extension of Public Notice Response Time

Dear Matt and John,

I have reviewed the October 2006 Clean Water Act 404(b)1 Contaminant Determination Report For Waukegan Outer Harbor (see attached) that was recently posted on the USACE public website on the proposed dredging at Waukegan Harbor. The report cites:

1. A quality assurance plan (discussed on page 14) that demonstrates the lab results are accurate is not found in the report or on the USACE website. There were significant problems with the QA/QC with similar sampling in the Approach Channel around that same time. I would like to obtain access to the QA/QC test results from Waukegan Outer Harbor to verify the 2006 CWA 404(b)(1) contamination determination was properly conducted. My fear is there was either no asbestos QA/QC or similar problems to the Approach Channel quality assurance program;
2. A human health risk assessment was conducted on the asbestos found in the Outer Harbor. The bottom of page 9 states, "Because the Waukegan Outer Harbor sediment asbestos measurements are statistically different from the Grant Park/Highland Park results, a human health risk assessment was conducted." The report itself and the USACE website does not contain the human health risk assessment performed on the Outer Harbor. The report and the USACE website does not identify who conducted the human health risk assessment. I am not aware of any human health risk assessments being performed at Waukegan Outer Harbor. A limited risk screen performed on the Approach Channel was significantly flawed. I would like to obtain access to the human health risk assessment cited in the October 2006 404(b) (1) contamination determination for the Waukegan Outer Harbor. I am concerned that a flawed limited risk screen was performed instead of the stated human health risk assessment.
3. I also am looking for any documentation that the cited "Human Health Risk Assessment" was independently peer reviewed. The 404(b)(1) document does not discuss what, if any, independent peer review has been performed. I am concerned about the validity of testing and risk assessments that do not address an independent peer review process. Do you have the information on the peer review process for the Human Health Risk Assessment performed in Waukegan Outer Harbor?

I fear that I will not have enough time to obtain and review the documents before the deadline to submit my public comments to the USACE regarding the dredging at Waukegan Harbor I would also like to request additional time for me to review these documents and include them in my public comments to USACE.

Let me know as soon as possible if 1) you can get these documents today, and 2) can I get a time extension to review them for my public comments which are currently due today.

Thank you for your assistance.

Paul Kakuris

312 371 9770

CLASSIFICATION: UNCLASSIFIED

From: [William Johnson](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source]
Date: Saturday, August 3, 2019 3:15:32 PM

I thought the Waukegan harbor was full of toxic waste. Doesn't sound like a good idea to me.

Sent from my iPhone

From: [Gard Jones](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Bad sand
Date: Saturday, August 3, 2019 7:04:57 AM

Hello,

Without some 150% guarantee that we're not moving the PCB laden sand from Waukegan to Lake Bluff, this would be a VERY terrible idea.

Keep in mind the affect of that to the small children running barefoot around the beach.

That's a perfect entry point for these banned chemicals.

Thank you,

Gj

From: [Deborah Cascarano](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Beach
Date: Friday, August 2, 2019 10:38:48 PM

Do not use the sand from Waukegan harbor if it is toxic for Lake Bluff!

Deborah
Sent from my iPhone

From: nancyshepherdson@gmail.com
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Comment, Sunrise Beach Project Sand Replenishment
Date: Monday, August 5, 2019 10:57:56 PM

Dear Mr. Belcik,

I am completely against the plan to bring in sand from Waukegan Harbor, much of which is likely contaminated by asbestos and other pollutants. Blocked<https://www.chicagotribune.com/suburbs/lake-county-news-sun/ct-Ins-johns-manville-st-0702-20150702-story.html>

Nancy Shepherdson

Lake County

From: [Sue M](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Is the sand clean?
Date: Saturday, August 3, 2019 7:47:57 AM

We are very concerned with what may be in the sand that you put in lake bluff. Are there unhealthy foreign agents such as PCBs? Please don't spread more toxins around.

Nj

Sent from my iPhone

From: [John Decker](mailto:John.Decker@usace.army.mil)
To: John.Decker@usace.army.mil
Cc: [John Decker](mailto:John.Decker@usace.army.mil), [John Decker](mailto:John.Decker@usace.army.mil)
Subject: 1307-002 (cont) Lake Erie Remediation
Date: Monday, August 5, 2019 12:19:39 PM

Dear John,

My main concern is the risk of PCB contamination of the material from Waskegan harbor. I know it has been deemed clean in 2014 but has resurfaced in 2018....why take the risk? If we wait a few years the water lake levels will go back down and the problem will be solved.

2014

EPA Declares "World's Largest PCB Mess" At Waskegan Harbor Clean <[Blockedhttps://chicago.cbslocal.com/2014/08/05/epa-declares-worlds-largest-pcb-mess-at-waskegan-harbor-clean/](https://chicago.cbslocal.com/2014/08/05/epa-declares-worlds-largest-pcb-mess-at-waskegan-harbor-clean/)>

<[Blockedhttps://chicago.cbslocal.com/2014/08/05/epa-declares-worlds-largest-pcb-mess-at-waskegan-harbor-clean/](https://chicago.cbslocal.com/2014/08/05/epa-declares-worlds-largest-pcb-mess-at-waskegan-harbor-clean/)>

EPA Declares "World's Largest PCB Mess" At Waskegan Harbor Clean

After nearly 30 years of legal wrangling and cleanup efforts, one of the most polluted sites on Lake Michigan ha...

2018

About Waskegan Harbor AOC | US EPA <[Blockedhttps://www.epa.gov/great-lakes-aoc/about-waskegan-harbor-aoc/](https://www.epa.gov/great-lakes-aoc/about-waskegan-harbor-aoc/)>

<[Blockedhttps://www.epa.gov/great-lakes-aoc/about-waskegan-harbor-aoc/](https://www.epa.gov/great-lakes-aoc/about-waskegan-harbor-aoc/)>

About Waskegan Harbor AOC | US EPA

A brief summary of the geography of the Waskegan Harbor Area of Concern and its history of contamination.

Summit Beach Pilot Project Sand Replenishment
Your Comments are Needed!

Lake Bluff Beach is part of a new pilot program to replace sand and combat erosion. It involves using dredged material from the Waskegan Harbor to protect 54,560 yards of shoreline at six sites including Sunrise Beach. We need your comments! The U.S. Army Corps of Engineers has a 30-day comment period and wants your opinion of the plan. For more information about the project, click here

<[Blockedhttps://www.usace.army.mil/Portals/0/PDF/20190723/BLUFF%20BEACH%20Pilot%20Project%20Sand%20Replenishment%20Plan%20-%20Public%20Comments%20-%20080719.pdf](https://www.usace.army.mil/Portals/0/PDF/20190723/BLUFF%20BEACH%20Pilot%20Project%20Sand%20Replenishment%20Plan%20-%20Public%20Comments%20-%20080719.pdf)>

YkAnSjQpTDMacMcwWb31GvYpW2_GETAklYVWfVvqj4sq2vQZFD008RTFQQRGZGzabwPbuW7VvJXWpT7_w1hP6vGv6m7JD1W1B6S5p9zL1Vd_sQz0m6cF7H3YAMYNmMB2yQvqjTMMQz7Q1WMM6vK3j007vqLPSvNqg8e=>ZzGjQXyS1E3d4vYM6v9vScXc1B6dGjBkPAuSpL5L_8cMA=&dcv=hd4vYR8vP4QySvW8Yv8Nv5Wm0NFAp64BQ6GAC_ZKH06vQv=>

Please direct your comments by email to John Belcik, at john.belcik@usace.army.mil <<mailto:john.belcik@usace.army.mil>>

Acute exposure

PCBs have very low potential for producing acute toxic effects. The only overt signs of exposure to PCBs is chloracne, which is a specific skin lesion. Although chloracne may resemble typical adolescent acne, it has certain distinct features [Cove 1970; Letz 1983].

- Chloracne's most distinctive feature is cystic, skin colored lesions that measure 1-10 mm.
- Chloracne's other prominent feature is comedonal lesions.

The comedones and cysts can become inflamed and secondarily infected with large pustules.

Unlike adolescent acne, chloracne may occur at any age and may involve the arms, back, face, legs, neck, and trunk.

Chloracne can be very persistent and refractory to treatment.

Acneiform lesions do not appear in all severely exposed patients, so the absence of chloracne does not rule out exposure. New cases of chloracne should be reported to the local or state health department.

Other acute effects that may be seen include eye irritation, nausea, and vomiting [LaDua 2006].

Elevated liver enzymes are the most sensitive indicator of exposure to PCBs in animals, and alterations in

- AST (SGPT),
- GGT (GGT),
- Bilirubin, and
- Albumin levels have been reported in human epidemiologic studies.

The absence of alterations in these liver function markers does not rule out excessive exposure to PCBs.

The presence of specific signs, symptoms, or laboratory abnormalities, with the possible exception of chloracne, is difficult to relate to exposure to PCBs absolutely in any given patient. A practical approach for the routine work-up of individual patients potentially exposed to PCBs would be to do the following:

- Take a thorough occupational and environmental exposure history.
- Examine the skin.
- Order baseline liver function tests, and
- If indicated, perform subsequent testing limited to patients with clinical problems or history of extensive exposure such as an accidental spill or a capacitor rupture that caused heavy skin contamination [Letz 1983].

This clinical approach may be used for monitoring electrical utility workers or other persons with some potential for ongoing occupational exposure.

Serum PCB level is a useful indicator of a patient's exposure. Serum PCB tests are readily available at most commercial reference laboratories. However, serum PCB levels may not be consistent with adverse health effects. [Roemer 2005].

John Decker

From: [Karen Zarse](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] pilot program for replenishing the sand at Sunrise Beach
Date: Saturday, August 3, 2019 8:39:51 AM

Waukegan harbor has been poluted with PCB's in the past. Any material from Waukegan harbor needs to be tested and passed that it is free of cancer causing contamination.

Karen Zarse

From: [Betsy Decker](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Sand replacement
Date: Monday, August 5, 2019 11:19:43 AM

Do not use sand from Waukegan Harbor!!! Contaminated and highly carcinogenic. Don't our taxes allow us to get sand from a better source!

Sent from my iPhone

From: [Robin](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Sunrise Beach Erosion/sand replacement
Date: Friday, August 2, 2019 11:01:52 PM

The largest priority is the health and safety of Lake Bluff residents/pets and the general population who frequent the beach. While providing documentation - I feel it's your obligation to make certain that the material dredged from Waukegan Harbor does not have contaminants from their industrial zones that infiltrate the sand. If there is any question at all then the village should be looking into other material.

While trying to read the report provided, I don't have a clear understanding of what the level of contaminant is. The only product to use is from dredging in an industrial area?

This makes me very uncomfortable!

Robin Jahraus
229 Hancock Ave

Sent from my iPhone

From: [John and Nancy](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Sunrise Beach
Date: Thursday, August 8, 2019 8:57:57 AM

I am 100% against sand from Waukegan being dredged and placed at Lake Bluff's Sunrise Beach!

From: [Karen Wands](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Waukegan Harbor dredge
Date: Wednesday, August 7, 2019 10:51:53 AM

Dear Sir:
Please tell me it is NOT TRUE

From: [Karen Wands](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] WAUKEGAN HARBOR
Date: Wednesday, August 7, 2019 11:04:35 AM

Dear Mr. Belcik:

Waukegan Harbor in Illinois is the most polluted of all the great lakes due to the massive amounts of pcbs.

There is word that there is an approved project to dredge this harbor area and the near Waukegan harbor to move sand to help secure the Lake Bluff beach area.

It is NOT SAFE to disturb this area due to the hazards of pcbs there and wondering HOW IN THE WORLD could this even be considered or approved.

If there is any way to table this project until there is proof that it is safe please recommend to do so. As of 2014, the EPA declared the harbor and surrounding area unsafe.

Not only will it be unsafe for all down stream of Waukegan, it is unsafe for all Lake Michigan water users and states that border Lake Michigan.

PLEASE STOP THIS PROJECT DUE TO SAFETY.

Thank you,

Karen Wands

karenwands813@gmail.com <<mailto:karenwands813@gmail.com>>

From: [Jeffery Camplin](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Cc: ildunesland@aol.com; pakcoastal@aol.com
Subject: [Non-DoD Source] REQUEST FOR A PUBLIC HEARING - USACE Waukegan Harbor draft 2019 Environmental Assessment
Date: Tuesday, August 20, 2019 8:38:33 PM
Attachments: [Camplin Complaint Request Letter to USACE 8-19-19 Waukegan Harbor Dredging - Final.pdf](#)

Mr. Belcik,

I strongly disagree with the USACE draft Finding of No Significant Impact (FONSI) along with the Section 401(b) (1) evaluation for the dredging and placement of polluted materials into the waters near the heavily populated Illinois Lake Michigan shoreline. Specifically, I can demonstrate that the documents in support of the FONSI that significantly downplay the risks of microscopic asbestos contamination in Waukegan Harbor sediments lack credibility, proper science, quality control, transparency, and independent peer review. These documents are also riddled with conflicts of interest and unsupported statements to deceptively give the appearance that statistically elevated levels of microscopic asbestos documented in Waukegan Harbor sediments pose no significant risk to the public.

The support documents I am referring to include:

1. USACE. 2006. Human Health Risk Assessment; Potential Asbestos Risks in Beneficial use of Dredged Material from Waukegan Outer Harbor, Waukegan, Illinois. Prepared by USACE Buffalo District, November 2006.
2. University of Illinois at Chicago, 2005. Illinois Beach State Park (IBSP): Determination of Asbestos Contamination in Beach Nourishment Sand. Interim Report of Findings. June 6, 2005.

Both documents rely on smoke and mirrors to deceive the public into believing areas verified to contain statistically elevated levels of microscopic asbestos to be "clean" and suitable to be dumped on our shorelines. Asbestos is an airborne health hazard and neither one of these documents contain any actual air sampling data when assessing public risk. What is mystifying is that there seems to be very little concern or understanding that when the asbestos contaminated, dredged sand finally washes up on the beaches, it dries and then is released by air currents or human activity and becomes toxic and deadly to humans and animals.

My attached report and request for a public hearing clearly demonstrates that these 2005/2006 documents were never valid and cannot be relied upon in 2019 as current science on risk-based approaches to assessing health hazards from exposure to airborne microscopic asbestos fibers. Note that my attached report is just the tip of the iceberg on decades of evidence I have in my possession to support my concerns.

Waukegan Harbor lake-bottom sediments have been confirmed by the State of Illinois and the USACE to contain statistically elevated levels of deadly microscopic asbestos fibers (including the more harmful and potent amphibole asbestos mineral fibers). Dredging and dumping this elevated asbestos pollution near public beaches will only increase the existing amount of microscopic asbestos fibers already present on the Illinois Lake Michigan shoreline. My concern is simple: The more you dump asbestos tainted sediments onto the Illinois Lake Michigan shorelines, the more the public health risks increase from the subsequent airborne exposure. We want less asbestos contamination on our shorelines and beaches, not more!!

It's time for new, current, science-based, asbestos testing and risk evaluations of Waukegan Harbor sediments (and other areas where the USACE has dumped harbor dredgings) to be performed under the supervision of an open and

independent peer review board. You can no longer hide behind these two flawed, biased, and woefully outdated documents cited above as your claim that no significant asbestos health risk is present today in the asbestos polluted Waukegan Harbor area.

Additionally, there is a need to establish current background levels of microscopic asbestos found on the public and private Illinois Lake Michigan shoreline. Then and only then will we be able to determine how much more asbestos contamination will be increasing each and every time USACE dumps tons and tons of asbestos tainted Waukegan Harbor sediments near heavily populated beach areas along the Illinois Lake Michigan shoreline. This is called "accountability." I noticed that the USACE is requesting to eliminate any further testing for asbestos contamination in Waukegan Harbor sediments and the shoreline beaches where they are dumping the asbestos pollution. This is called "ducking accountability." My attached report clearly demonstrates the ongoing need for additional asbestos testing and risk evaluations to properly ensure the safety of the public.

It is for these, and many other reasons, that I am requesting a public hearing where the USACE can officially respond to the many questions and concerns I present in the attached report. I visit the Illinois Lake Michigan shoreline frequently with my family and friends. I am concerned about our increased exposure to airborne microscopic asbestos fibers when visiting shoreline locations stretching from Winthrop Harbor, IL all the way down to Oak Street beach in Chicago, IL. Enough is enough!

I look forward to hearing back from you in a timely manner.

Cordially,

Jeff

Jeffery C. Camplin, CSP, CPEA, CET

Illinois Licensed Asbestos Professional 100-00091

Concerned Citizen of Lake County Illinois

From: [Illinois Dunesland](#)
To: [Belcik, John T CIV USARMY CELRC \(USA\)](#)
Subject: [Non-DoD Source] Response to Public Notice CELRC-PMD-EF (John Belcik)
Date: Tuesday, August 20, 2019 11:53:42 PM
Attachments: [IL Dunesland Complaint to USACE & Request for a Public Hearing 8 20 19.pdf](#)

John

Attached is Illinois Dunesland Preservation Society response to Public Notice CELRC-PMD-EF
Paul

Paul Kakuris, President
Illinois Dunesland Preservation Society
P.O Box 466
Zion, IL 60099
312.332.2277
Illinois Dunesland Preservation Society <Blocked<http://www.illinoisdunesland.org/>>
Find Us on Facebook! <Blocked<https://www.facebook.com/IllinoisDunesland/>>

Note, email comments received from Mr. Jeffery Camplin and Mr. Paul Kakuris, both had the below document attached to their email.



Illinois Dunesland Preservation Society

Protecting the Nation's First State Dedicated Nature Preserve

Paul A. Kakuris, President

P.O. Box 466 Zion, IL 60099

Phone Number: 312 371-9770

www.illinoisdunesland.org *ildunesland@aol.com*

August 20, 2019

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO, IL 60604

Attention: CELRC-PMD-EF (John Belcik) John.T.Belcik@usace.army.mil

Subject: Public Comment on Draft Environmental Assessment
Waukegan Harbor Maintenance Dredging and Placement

To Whom It May Concern:

Submitting our formalized comments, I represent the Illinois Dunesland Preservation Society, which is a 70+ year old environmental organization that co-founded Illinois Beach State Park.

The genesis of the scheme to distribute asbestos contaminated dredgings from Waukegan Harbor began with the creation of IDNR's sand management organization created by the agency's Coastal Zone department. The scheme was to distribute the sand that was dredged to various North Shore municipal government properties on the Illinois shoreline. The sand group was cherry-picked by the agency, lacked inclusion of the majority of the shoreline owners, and was comprised of the regulatory agencies and North Shore riparian governments. Additionally, a few other organizations were included. The hand-picked members' agenda was certainly to plan policy and sand distribution for their respective governments' shorelines at a miniscule cost.

This group was not representative of the majority of the shoreline owners (private riparians who make up approximately 60% of the Illinois shoreline). The owners have a different agenda and viewpoint that are not supported by the makeup of the sand group. Private riparians were obviously excluded because their interests in protecting their shorelines was of no concern to the government regulators and the members of the sand group. In addition, these regulators had severely mismanaged the administration of proper coastal management in Illinois and were interested in keeping their failures out of sight of the 60% shoreline owners – the private riparians. The agency refused to include

other knowledgeable consultants and experts in the group because they had the knowledge to enlighten the above-mentioned group, thereby exposing the malfeasance of various regulatory agencies. Some of the apparent wrongdoing has put the health and safety of the entire Illinois shoreline and their residents at a heightened risk. In the process, they mishandled federal and state tax dollars in this cover-up process.

Today I asked the USACE for the "human health risk assessment" you cite in your draft 2019 Environmental Assessment of Waukegan Harbor Dredging that supports your conclusion that asbestos poses no significant risk at Waukegan Harbor. The response from Mr. Shanks was, *"The 2006 report and its findings are not representative of the existing shoaled sediment in the Outer Harbor today. We believe there is sufficient data and supportive documentation provided on the website currently to inform both agency and public review of the proposed future dredging as well as characterization of the existing conditions."* This response now indicates there is no current asbestos sampling or risk assessment of Waukegan Harbor sediments using the sensitive elutriator testing as you did in 2006, which found "statistically elevated levels of asbestos" in the outer channel.

The only other testing used an inappropriate analytical method that does not identify asbestos in beach sands and sediments. Therefore, the draft 2019 Environmental Assessment should be withdrawn until proper asbestos sampling and a revised human health assessment can be conducted. Otherwise, there is no evidence of any current airborne asbestos risk evaluation of Waukegan Harbor sediments.

It is clear that Waukegan Harbor and miles of the Illinois Lake Michigan shoreline have elevated levels of microscopic asbestos contamination, including the more deadly amphibole asbestos fibers. In 1998, the Illinois Director of the Illinois EPA concluded that asbestos contaminated lake-bottom sediments offshore of Waukegan were a regulated industrial process waste or pollution control waste subject to special handling and regulated disposal. In 2000, the Illinois Attorney General's office identified the USACE as a potentially responsible party for the significant asbestos contamination on Illinois Beach State Park from dredging and dumping the regulated asbestos contaminated lake-bottom sediments offshore of Waukegan. As a polluter, the USACE has worked hard to downplay the impact of their egregious behavior by utilizing inferior asbestos testing methods to ensure no asbestos was detected. USACE also hides behind the Illinois Attorney General's secret asbestos task force report that fraudulently states no risk from asbestos fibers they found in the Waukegan Harbor Approach Channel without taking one air sample.

In 2003, a new Illinois Attorney General was elected and the USACE and other polluters were suddenly protected from prosecution. The new Illinois Attorney General also convened a secret asbestos task force to skew studies and downplay the pollution the USACE and the State of Illinois had created. You cite these studies in your 2019 draft Environmental Assessment. However, the attachment from Mr. Jeffery Camplin demonstrates that the old 2005 asbestos study by UIC is flawed, biased, and outdated to

support your claim that no significant asbestos health risk is present in the asbestos polluted Waukegan Harbor area.

The dredging, dumping, and spreading of asbestos contaminated sediments from Waukegan Harbor must stop. Discredited past reports must no longer be relied upon to spin a tale of safety. New testing must be performed using the best science that is supervised under independent peer review and must take place immediately. Polluters should not be able to rig studies and review their own work product.

We request a public hearing and support all the evidence stated by Mr. Camplin who is an internationally recognized asbestos expert who has taught asbestos classes for many years and given credentials to some of those in the regulatory agencies involved in this cover-up.

Sincerely,

Paul A. Kakuris

Paul A. Kakuris, President

c. Colonel Arron W. Reisinger
Jeffery C. Camplin

Attachment:

August 20, 2019 Email Cover & Attachment Requesting a Public Hearing from Jeffery C. Camplin

From: mundycamp@aol.com

To: John.T.Belcik@usace.army.mil

Cc: ildunesland@aol.com, pakcoastal@aol.com

Sent: 8/20/2019 8:37:02 PM Central Standard Time

Subject: REQUEST FOR A PUBLIC HEARING - USACE Waukegan Harbor draft 2019 Environmental Assessment
Mr. Belcik,

I strongly disagree with the USACE draft Finding of No Significant Impact (FONSI) along with the Section 401(b)(1) evaluation for the dredging and placement of polluted materials into the waters near the heavily populated Illinois Lake Michigan shoreline. Specifically, I can demonstrate that the documents in support of the FONSI that significantly downplay the risks of microscopic asbestos contamination in Waukegan Harbor sediments lack credibility, proper science, quality control, transparency, and independent peer review. These documents are also riddled with conflicts of interest and unsupported statements to deceptively give the appearance that statistically elevated levels of microscopic asbestos documented in Waukegan Harbor sediments pose no significant risk to the public.

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Both documents rely on smoke and mirrors to deceive the public into believing areas verified to contain statistically elevated levels of microscopic asbestos to be "clean" and suitable to be dumped on our shorelines. Asbestos is an airborne health hazard and neither one of these documents contain any actual air sampling data

when assessing public risk. What is mystifying is that there seems to be very little concern or understanding that when the asbestos contaminated, dredged sand finally washes up on the beaches, it dries and then is released by air currents or human activity and becomes toxic and deadly to humans and animals.

My attached report and request for a public hearing clearly demonstrates that these 2005/2006 documents were never valid and cannot be relied upon in 2019 as current science on risk-based approaches to assessing health hazards from exposure to airborne microscopic asbestos fibers. Note that my attached report is just the tip of the iceberg on decades of evidence I have in my possession to support my concerns.

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It's time for new, current, science-based, asbestos testing and risk evaluations of Waukegan Harbor sediments (and other areas where the USACE has dumped harbor dredgings) to be performed under the supervision of an open and independent peer review board. You can no longer hide behind these two flawed, biased, and woefully outdated documents cited above as your claim that no significant asbestos health risk is present today in the asbestos polluted Waukegan Harbor area.

Additionally, there is a need to establish current background levels of microscopic asbestos found on the public and private Illinois Lake Michigan shoreline. Then and only then will we be able to determine how much more asbestos contamination will be increasing each and every time USACE dumps tons and tons of asbestos tainted Waukegan Harbor sediments near heavily populated beach areas along the Illinois Lake Michigan shoreline. This is called "accountability." I noticed that the USACE is requesting to eliminate any further testing for asbestos contamination in Waukegan Harbor sediments and the shoreline beaches where they are dumping the asbestos pollution. This is called "ducking accountability." My attached report clearly demonstrates the ongoing need for additional asbestos testing and risk evaluations to properly ensure the safety of the public.

It is for these, and many other reasons, that I am requesting a public hearing where the USACE can officially respond to the many questions and concerns I present in the attached report. I visit the Illinois Lake Michigan shoreline frequently with my family and friends. I am concerned about our increased exposure to airborne microscopic asbestos fibers when visiting shoreline locations stretching from Winthrop Harbor, IL all the way down to Oak Street beach in Chicago, IL. Enough is enough!

I look forward to hearing back from you in a timely manner.

Cordially,

Jeff

Jeffery C. Camplin, CSP, CPEA, CET
Illinois Licensed Asbestos Professional 100-00091
Concerned Citizen of Lake County Illinois

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

1-708-284-4563
Email: MundyCamp@aol.com

August 19, 2019

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO, IL 60604

Attention: CELRC-PMD-EF (John Belcik)

Subject: Public Comment on Draft Environmental Assessment
Waukegan Harbor Maintenance Dredging and Placement

To Whom It May Concern:

Sediments Containing Statistically Elevated Levels of Deadly Microscopic Asbestos Fibers, Including the More Harmful and Potent Amphibole Asbestos Mineral, Should Not Be Dumped on Public Shorelines Where Children Will Be Exposed! The USACE Must Stop Polluting the Shoreline!



Executive Summary: New, More Sensitive Testing of Waukegan Harbor Lake-Bottom Sediments Are Required. Sediments Have Already Been Confirmed in 2005 to Contain Elevated Levels of Deadly Microscopic Asbestos Fibers. All New Testing Must Be Performed Under Independent Peer Review. Dumping Microscopic Asbestos on IL Beaches Is Wrong!

The USACE deceptively claims that lake-bottom sediments found in Waukegan Harbor dredging areas are “clean” with no risk from harmful microscopic asbestos fibers. The USACE further tries to get approval to end ever having to test for asbestos contamination now or in the future. Yet the USACE is aware there is strong evidence indicating that Waukegan Harbor (inner, approach, and outer harbors) is polluted with statistically elevated levels of deadly microscopic asbestos fibers, including the more harmful and potent amphibole asbestos mineral fibers. The last testing that confirmed this fact was performed way back in 2005. Conditions in Waukegan Harbor have changed over the last 14 year. It is time to re-evaluate the asbestos hazard in the Waukegan Harbor lake-bottom sediments using the best science under independent peer review.

Additionally, background levels of asbestos should be established using the same sensitive methods on beach areas where this asbestos polluted dredge material will be dumped. These beach areas must also undergo timely testing during the spring/summer months after each dredging and dumping event to measure the elevation of asbestos contamination on the shorelines. Risk assessments based upon actual air sampling data (instead of skewed modeling) must also be performed to ensure that the public is protected from the obvious dangers of toxic microscopic asbestos fibers.

The USACE has been identified by the Illinois Attorney General’s Office as a potentially responsible party for spreading asbestos contamination on Illinois Beach State Park in the 1990’s. Its time for the USACE to take responsibility and make sure they do not repeat the egregious act of continuing to pollute the Illinois Lake Michigan shoreline with deadly microscopic asbestos fibers, including the more harmful and potent amphibole asbestos minerals. I look forward to discussing these issues in greater detail at a public hearing.

Waukegan Harbor Lake-Bottom Sediments Are Contaminated with Deadly Microscopic Asbestos Fibers – New Testing is Mandatory!

Statistically elevated levels of microscopic asbestos were confirmed in an asbestos study performed by the University of Illinois at Chicago’s School of Public Health in 2005. All twelve of the samples were found to contain the statistically elevated levels of deadly microscopic asbestos, including the more harmful and potent amphibole asbestos mineral fibers. The microscopic asbestos was identified in all twelve samples using an analytical method known as the “Superfund/Elutriator,” a very sensitive analytical method with an extremely low detection limit. UIC stated in their 2006 report (page 24) that they selected this method because they *“reviewed the analytical techniques and results of air sampling and other testing previously performed on beach sand and nourishments and sources as referenced above. Although the bulk methods that were used are standard methods for characterizing ACM, the sample preparation*

and analytical techniques of these methods do not have sufficient analytical sensitivity for quantitative characterization of sand and soil.”

The inferior sand sampling analytical methods that UIC found “*do not have sufficient analytical sensitivity for quantitative characterization of sand*” are the only methods that the US Army Corps of Engineers (USACE) has ever utilized when testing beach sediments. The USACE is being deceptive in their 2019 draft Environmental Assessment when the public websites state that “*The Illinois Attorney General Office did a study on asbestos in beach sand, with the conclusion that Waukegan Approach Channel sand is not contaminated.*” In fact, the Illinois Attorney General’s Office commissioned the UIC report, which found “statistically elevated” levels of deadly microscopic asbestos including the more harmful and potent amphibole asbestos mineral fibers.

[The Spreading of Deadly Asbestos Continues: 2014 USACE Dredged Deadly Microscopic Asbestos Contaminated Sediments for Waukegan Harbor in 2014 and Spread Asbestos Contamination to the USEPA’s John-Manville Superfund Site. Updated Testing by USACE is Necessary.](#)

The USACE draft 2019 Environmental Assessment boasted that “clean” sediments from Waukegan Harbor were placed as a cap on an asbestos Superfund Site immediately to the north at the former Johns-Manville contamination site. Page 38 of the 2019 draft USACE Environmental Assessment states: “*In 2014, USACE dredged the Outer Harbor and placed the clean but fine grained sediment upland on a portion of the superfund site, under an economy act agreement with the USEPA.*” However, is the USACE aware that within the last year, the USEPA reported at the Waukegan Citizens’ Action Group (CAG) meeting that asbestos contamination was discovered in the cap material at the Johns-Manville site. This would be the same “clean” dredge material that USACE wants to dump and spread deadly microscopic asbestos contamination along Evanston, Glencoe, North Chicago, Waukegan and other municipal beaches. The recent finding of contamination of deadly microscopic asbestos fibers found in sediments dredged from the Waukegan Outer Harbor area and placed in the cap material at the Johns-Manville Superfund site demands that new testing must be conducted in Waukegan Harbor using proper analytical techniques that can evaluate the level of microscopic contamination in Waukegan Harbor dredging areas. Spreading deadly asbestos contamination must stop!

[New Asbestos Testing in 2020 Required to Re-evaluate the 2005 Finding of Statistically Elevated Levels of Microscopic Asbestos in Waukegan Harbor before Dumping Asbestos onto the Lake Michigan Shoreline.](#)

I have reviewed your draft Environmental Assessment (EA). There are several misstatements of fact and mischaracterization of the undisputed finding that Waukegan Harbor Approach Channel contains statistically elevated levels of deadly microscopic asbestos fibers, including the more harmful and potent amphibole asbestos minerals. A review of the draft EA and information provided to the public on your website deceptively mischaracterized the fact that the main supporting document in your EA states, “*The sand sampling results indicate that the concentration of asbestos structures per gram of PM10 in the beach sand at the IBSP North*

*Unit, the lake-bottom sand at the Approach Channel to Waukegan Harbor, and the lake-bottom sand at the North Point Marina **were significantly different (greater) than background area.***

- A draft USACE Environmental Assessment that completely ignores an evaluation of elevated levels of deadly microscopic asbestos fibers in Waukegan Harbor Approach Channel is not protective of public health.
- A draft USACE Environmental Assessment that requests dredging lake-bottom sand and sediments from offshore of Waukegan that are known to contain statistically elevated levels of microscopic asbestos fibers, including the more harmful and potent amphibole asbestos mineral, and dumping them on public shorelines, is not protective of public health.
- A draft USACE Environmental Assessment that requests not performing any further testing for deadly microscopic asbestos fibers in future dredging and dumping of lake-bottom sand and sediments offshore of Waukegan that are known to contain elevated levels of microscopic asbestos fibers, including the more harmful and potent amphibole asbestos mineral, is not protective of public health.
- A draft USACE Environmental Assessment that mischaracterizes and deceptively misstates findings from a non-peer reviewed, significantly flawed and limited risk screen, performed by individuals who had no prior experience performing asbestos risk assessments of lake sediments, no prior experience sampling beach sand and lake-bottom sediments for asbestos, and no prior experience analyzing beach sands and lake-bottom sediments for the presence of microscopic asbestos, is not protective of public health.
- A draft USACE Environmental Assessment that mischaracterizes and deceptively misstates findings from a significantly flawed and limited risk screen that evaluated airborne exposure to the statistically elevated levels of deadly microscopic asbestos fibers using a skewed and rigged “indirect” air sampling model instead of actually performing real world air testing is not protective of public health.
- A draft USACE Environmental Assessment that mischaracterizes and deceptively misstates findings of lab testing of Waukegan Harbor sand and sediments that either failed quality control testing or never had any quality control testing performed to verify accuracy of sediment sampling, is not protective of public health.
- Mischaracterizing and deceptively misstating findings in a draft USACE Environmental Assessment that is not supported by any independently peer reviewed human health risk assessments is not protective of public health.
- In short, disturbing sediments in Waukegan Harbor that contain elevated levels of deadly microscopic asbestos fibers, including the more harmful and potent amphibole mineral fibers, and dumping them along public beaches and shorelines, is not protective of public health!

For the reasons stated in this response/report the Public Notice must be rescinded/withdrawn and a new round of legitimate more stringent sampling and testing must be implemented in Waukegan Harbor and the USACE must subsequently issue a new Public Notice and conduct a Public Hearing.

Introduction

I am one of the first licensed asbestos professionals in the State of Illinois. I have been teaching USEPA asbestos abatement training courses for over 30 years. Many of the scientists and asbestos professionals involved with asbestos cleanup and asbestos testing along the Waukegan and Illinois Beach State Park shoreline have been accredited to perform this work by attending the courses I teach. In 1988 I set up an accredited asbestos laboratory and analyzed thousands of asbestos samples. I am currently the president of Camplin Environmental Services, Inc., a safety and environmental consulting firm I founded in 1991. I am a well-known speaker and author on the topic of asbestos. I have been involved with the issue of asbestos contamination on the Illinois Lake Michigan shoreline since 2003. I have testified in front of a Congressional sub-committee hearing in Washington DC on improper testing and evaluation of the asbestos contamination in this area by State and Federal Agencies. I was also invited to speak at the World Asbestos Conference in Sicily, Italy on the improper testing of the Illinois Shoreline by State and Federal Agencies. I am also a certified safety professional (CSP) holding a BS and MS in occupational safety and health.

USACE Uses Smoke and Mirrors to Downplay Hazards of Known Asbestos Contamination in Waukegan Harbor Dredge Areas

It is my professional opinion that the reports cited as evidence of no asbestos contamination and no health risk stated in the USACE draft Environmental Assessment (EA) for Waukegan Harbor Maintenance area is fatally flawed and does not support this conclusion. Additionally, the USACE EA and supporting public website contains several misleading and/or completely false statements concerning the presence of deadly microscopic asbestos fiber contamination and public health risks. Finally, the request not to have to perform any further testing and/or evaluations of the Waukegan Harbor lake sediments for asbestos should be eliminated. It has already been proven by reports cited in the draft EA that the Waukegan Harbor Approach Channel sediments are known to contain “statistically elevated” levels of deadly microscopic asbestos fibers (including the much more potent amphibole asbestos fibers). No credible or independent peer reviewed risk assessments have ever been conducted on the asbestos contaminated sediments found in Waukegan Harbor. For this and many other reasons, I find the USACE revision of the draft EA should be withdrawn based upon the flawed evidence and illegitimate, skewed, modified, and less stringent sampling/testing protocols cited in its examination of asbestos risk.

100 Year History: Massive Asbestos Contamination in Waukegan Waters

The Illinois Lake Michigan shoreline near Waukegan Harbor has had a nearly 100-year history of asbestos pollution issues. Yet, the USACE draft EA completely ignores the massive microscopic asbestos contamination in the Harbor area. Confirmed sources of asbestos pollution include:

- The Johns-Manville asbestos manufacturing plant which operated from approximately 1920 until about 1989;
- A bungled USEPA Superfund cleanup of the Johns-Manville Superfund site that allowed asbestos-contaminated demolition run-off water from the old Johns-Manville settling pond to be released directly into Lake Michigan;

- Dredging the asbestos-contaminated sediments of the lake water intake at the old Commonwealth Edison power plant immediately south of the Johns-Manville site and dumping the polluted waste on and offshore of Illinois Beach State Park.
- Dredging the asbestos-contaminated sediments in the Waukegan Harbor approach channel and dumping the sediments immediately offshore of Illinois Beach State Park.

More specifically, although friable, visible asbestos debris exists on and off the Waukegan shoreline, the main concern is the deadly microscopic asbestos fibers that actually cause asbestos-related lung cancer and mesothelioma. Statistically elevated levels of asbestos have been confirmed in the Waukegan Harbor Approach Channel. There are several contributing factors to why elevated levels of asbestos are found in Waukegan Harbor.

1. **JOHNS-MANVILLE POLLUTED THE WAUKEGAN LAKEFRONT FOR OVER 50 YEARS.** A study of fish in Lake Michigan in 1982 found that asbestos waste disposal from the Waukegan Johns-Manville asbestos manufacturing plant into Lake Michigan created a “white ditch” that spewed asbestos fibers into lake waters. This massive release of asbestos fibers into Lake Michigan decimated the commercial whitefish industry in Waukegan as early as the 1920’s.¹ An Illinois Department of Conservation funded study by the University of Wisconsin contained a statement from a commercial fisherman interviewed for the study in 1978 who stated, “We stopped fishing pound nets when John Manville came into Waukegan...” “That was about 1920 and 1922. Up until then we were catching a lot of nice white fish in the summer, but when John Manville came in, they dumped all their excess asbestos in the lake. We’d be swimming, wading in 6-12 inches of asbestos waste. The white fish would get it in their gills.” This site is immediately north of the Waukegan Harbor. The “white ditch” dumped massive amounts of asbestos fibers into Lake Michigan for over 50 years.
2. **THE ILLINOIS EPA AND USEPA ALLOWED THE JOHNS-MANVILLE SUPERFUND SITE TO SPEW WASTE WATER CONTAINING MASSIVE AMOUNTS OF ASBESTOS FIBERS DIRECTLY INTO LAKE MICHIGAN.** The industrial canal water discharge from the Superfund Site surprisingly exceeded the allowable asbestos fiber discharge level stated in the expired discharge permit in May, 2002 (during opening week at the adjacent public beach) by over 14 million asbestos fibers per liter of water. No violation or subsequent enforcement action was issued by Illinois EPA or U.S. EPA until years later when my 2003 report brought it to their attention. The City of Waukegan intake for drinking water, the Illinois Beach State Park public beach, Waukegan Harbor, and the Waukegan’s public beach are in close proximity to the Johns-Manville Superfund industrial canal water discharge pipe.
3. **DREDGING ACTIVITIES AT THE LAKE WATER INTAKE OF THE OLD COMMONWEALTH EDISON POWER PLANT IN WAUKEGAN DISTURBED ASBESTOS DISPOSAL SITES IN LAKE SEDIMENTS CHARACTERIZED BY ILLINOIS EPA AS A REGULATED ASBESTOS WASTE.** Dredging operations disturb regulated asbestos waste that was previously dumped into Lake Michigan, causing asbestos-contaminated plumes to re-contaminate lake water. The dredged material has had visible and microscopic asbestos contamination identified in it. In

¹ University of Wisconsin Institute for Environmental Studies, Marine Studies Center. “A Strategy for Re-establishing Self-sustaining Lake Trout Stocks in Illinois Waters of Lake Michigan.” Report Number 42, March 1982.

previous years, this material was dumped on the Illinois Beach State Park public beach as a replenishment material. An Illinois EPA memo dated November 13, 1998 from former Director Mary Gade indicates the dredged material should be handled as a regulated industrial process waste or a pollution control waste since it was disturbed from an original asbestos disposal site at the bottom of Lake Michigan. Once it is disturbed, it was the Illinois EPA's opinion that it is a regulated waste and recommends not disturbing this material in the future. The IEPA Director recommended against using asbestos contaminated lake-bottom sediments as beach nourishment. The 1998 IEPA Gade letter is attached for your reference.

4. **THE USACE MISREPRESENTS MASSIVE ASBESTOS CONTAMINATION IN APPROACH CHANNEL LAKE BOTTOM SEDIMENTS BY CLAIMING NO ASBESTOS CONTAMINATION WHEN THE REPORT ACTUALLY FOUND STATISTICALLY ELEVATED LEVELS OF ASBESTOS CONTAMINATION.**

The draft Environmental Assessment provided by the USACE cites the Illinois Attorney General's June 20, 2006 asbestos task force report entitled, "*Illinois Beach State Park (IBSP): Determination of Asbestos Contamination in Beach Nourishment Sand Final - Report of Findings*" as evidence that the Approach Channel sediments are not contaminated with asbestos. Under USACE responses found on their website's Frequently Asked Questions section regarding asbestos from the Johns-Manville Superfund site, the USACE deceptively states: "*The Illinois Attorney General Office did a study on asbestos in beach sand, with the conclusion that Waukegan Approach Channel sand is not contaminated.*" First, not only did every sample in the Waukegan Approach Channel contain asbestos fibers, the report concluded the sediments were "statistically elevated" when compared to other areas along the shoreline. Furthermore, the asbestos fibers found in sediments of the Waukegan Harbor Approach Channel contained the much more dangerous microscopic amphibole asbestos mineral fibers that are significantly more toxic to human health.

Overview of My Involvement and My Concerns with the USACE Draft EA

As stated above, asbestos pollution has plagued Waukegan's Lake Michigan shoreline for nearly 100 years. In the 1920's, commercial fisherman complained about the white asbestos fibers spewing into the lake from the Johns-Manville asbestos manufacturing plant getting into the gills of fish and killing off their livelihood. In 1987, the USEPA designated the Johns-Manville asbestos manufacturing plant on the Waukegan shoreline as a Superfund site. During the asbestos cleanup of this site, demolition activities illegally discharged millions of deadly microscopic asbestos fibers per liter into lake waters just north of Waukegan public beaches and the harbor area. In 1997, the beaches of Illinois Beach State Park were closed due to visible asbestos debris appearing on the beaches.

Army Corps of Engineers Identified By Illinois Attorney General as a Potential Polluter for Spreading Asbestos Contamination on Lake Michigan Shoreline During Dredging Activities in the mid-1990's.

It was later determined by the Illinois Attorney General's office that the potentially responsible parties who created this pollution included the US Army Corps of Engineers (USACE). The USACE had dredged sediments from offshore of Waukegan (see 2000 IAG letter in Attachment B). Those asbestos contaminated dredge sediments were subsequently dumped along the beaches

and shoreline of Illinois Beach State Park. In 1998, the State claimed the beaches were clean and reopened them based upon the now discredited asbestos study they commissioned from Hansen Engineering (the “Hansen Report”).

The “Camplin Report” Exposes a Cover-Up USACE Asbestos Pollution

In early 2003, I was contacted by Paul Kakuris, president of the Illinois Dunesland Preservation Society (IDPS) to evaluate the continued presence of asbestos debris appearing along the Illinois Beach State Park shoreline. In June of 2003, I prepared a report on my findings entitled, “Review of Current Asbestos Contamination Concerns: Illinois Beach State Park State Dedicated Nature Preserve and Federal Critical Habitat; Johns-Manville Superfund Site #2; Midwest Generation Fishing Pier Area; Proposed Waukegan Outdoor Sports Complex Site, and Lake Michigan. This report was commonly referred to as the “Camplin Report” (see Attachment B). The Camplin Report was submitted to the Illinois Attorney General’s Office (IAG).

Secret Asbestos Task Force Comprised of Polluters Begins the Process of Covering Up Their Asbestos Pollution with Skewed UIC Asbestos Study.

Upon review of my report, the IAG formed a secret asbestos “task force” in late 2003 made up of several of the members who were already identified as potentially responsible parties to the asbestos pollution including the City of Waukegan, Johns-Manville, the Illinois Department of Natural Resources, Commonwealth Edison, and the US Army Corps of Engineers. This secret “IAG task force” substantially comprised of the asbestos polluters, commissioned a study in 2004 that included the University of Illinois at Chicago School of Public Health and was substantially lead by the attorneys at the IAG’s office, which already had some of the polluters/task force members as clients. **The IAG refused to allow independent asbestos experts to be part of that task force. The IAG also arbitrarily and capriciously barred other experts and the public from attending the task force meetings in apparent violation of the open meeting laws.**

Illinois Attorney General’s Secret Asbestos Task Force Skews Data to Find that Statistically Elevated Levels of Microscopic Asbestos in Beach Sand and Offshore Lake-Bottom Sediments Does Not Present a Significant Risk!

In 2006, the IAG/UIC School of Public Health released their report that evaluated whether statistically elevated levels of microscopic asbestos were present in Waukegan Harbor. The UIC report commissioned by the Illinois Attorney General’s asbestos task force, which was primarily comprised of polluters, found that in fact Waukegan Harbor was contaminated with elevated levels of microscopic asbestos. Most disturbing was the finding that these deadly microscopic asbestos fibers were not only the more common Chrysotile asbestos. Every sample obtained in the UIC report from Waukegan Harbor Approach Channel also found the more toxic and potent amphibole asbestos fibers present.

UIC Uses Inexperienced Consultants and Labs to Evaluate Public Airborne Exposure to Dangerous Microscopic Asbestos Fibers – Without

Taking One Air Sample!!! Instead They “Simulate” Exposure with Rigged Testing Protocol that Failed Quality Control Testing.

The UIC School of Public Health then evaluated the possibility of asbestos being released from dredged materials. However, no one from UIC School of Public Health had ever performed an asbestos study like this. The consultant who performed the testing of asbestos contaminated beach sands and sediments on and offshore of Illinois State Beach Park and Waukegan Harbor had never conducted this type of sampling. The lab that analyzed the samples had never performed this type of analysis in the past. Yet somehow, even though the report confirmed the presence of statistically elevated levels of deadly microscopic asbestos on Illinois Beach State Park and Waukegan Harbor, the skewed 2006 UIC report concluded there was no substantial risk to the public from airborne asbestos fibers from dredging and dumping the asbestos contaminated sediments along the Lake Michigan shoreline. This skewed conclusion was made without one air sample being taken as part of their study. Instead, the biased Attorney General’s taskforce of polluters hired an inexperienced team of investigators to use an inexperienced team of sampling consultants to have samples analyzed by an inexperienced laboratory to conclude there was no airborne hazard resulting from dredging and dumping sediments that contained statistically elevated microscopic asbestos fibers while utilizing an “indirect sampling” method while following a modified and unapproved USEPA draft method which simulated airborne exposure.

No Independent Peer Review Has Been Conducted on Any Asbestos Testing Performed from the mid-1990’s to Date. The Asbestos Polluters with the State of Illinois and Army Corps of Engineers Review and Approve Their Own Skewed and Invalid Work Products.

To date, there has not been any independently peer reviewed risk assessment performed using actual air testing following recognized, legitimate, and validated sampling and analytical protocols. It is therefore my professional opinion that the draft EA lacks any valid supporting evidence that the statistically elevated levels of deadly microscopic asbestos fibers, including the more dangerous and potent amphibole asbestos fibers, do not pose a significant risk to human health. The draft EA should be withdrawn until a scientifically sound risk assessment has been validated by independent peer review. A significantly flawed assessment that uses “indirect” air sampling, an inexperienced public health team, inexperienced consultant, and an inexperienced lab commissioned by a group comprised of the agencies named as potentially responsible parties is fraudulent. I will not allow the public to be snookered by self-serving polluters who claim their pollution doesn’t harm the public. Let an independent peer review panel that has no ties to the polluters make that judgement. In 2007, one year after UIC released their final report (that had been edited by the IAG’s attorneys and the task force’s polluters) to the Illinois Attorney General’s secret asbestos task force, their website stated the report was still under peer review (see Attachment F for a screenshot of the UIC website from 2007). **I am requesting that the USACE commission an independent peer review committee to investigate the charges I am making against your deceptive asbestos statements found in the 2019 draft Environmental Assessment.**

Request for a Public Hearing and Supporting Evidence from USACE

I am requesting a public hearing to expose the USACE's efforts to beguile the public and continue their egregious behavior of knowingly spreading asbestos-contaminated lake sediments on and offshore of the Illinois Lake Michigan shoreline. More specifically, I am challenging the validity of the draft Environmental Assessment (EA) for the above referenced dredging activities on the following basis:

1. The USACE draft EA performed a contamination determination found in Appendix A. The document evaluated potential pollutants and contaminants to determine the suitability of dredged sediments for placement on and offshore of public beaches. The word "asbestos" appears only once in the document on page 4 where it states: "There are no sources of asbestos or PCBs for the Outer Harbor." The draft EA is fatally flawed because it did not evaluate the known presence of statistically elevated levels of deadly microscopic asbestos fibers, including the more harmful and potent amphibole fibers.
I request that the USACE present evidence at the public hearing on why asbestos was not included as an evaluated contaminant in Appendix A of their draft Environmental Assessment.
2. The USACE public website and draft EA grossly misstates and conveniently ignores evidence that statistically elevated levels of deadly microscopic serpentine and significantly more potent amphibole fibers are found in Waukegan Harbor. The Illinois Attorney General's asbestos task force funded a study of Waukegan Harbor sediments in 2006 that clearly found statistically elevated levels of deadly microscopic asbestos fibers, including amphibole asbestos fibers, which are significantly more potent to human health. In fact, of all of the shoreline areas tested in the report, only the Waukegan Approach Channel had all samples identified as containing deadly microscopic asbestos fibers. The USACE website guilefully characterizes the asbestos-contaminated sediments as "The Illinois Attorney General's Office did a study on asbestos in beach sand, with the conclusion that Waukegan Approach Channel sand is not contaminated."
I request that the USACE present evidence in support of their misleading statement at the public hearing.
3. The USACE website and draft EA grossly misstates and conveniently ignores the airborne hazard created when sediments offshore of Waukegan are disturbed. The Illinois Attorney General's asbestos task force funded study of Waukegan Harbor sediments in 2006 performed "indirect" testing to evaluate the potential release of deadly microscopic asbestos fibers from the statistically elevated Waukegan Harbor dredge sediments. The indirect method found low airborne releases of asbestos. However, real world air testing of asbestos-contaminated lake bottom sediment offshore of Waukegan conducted by Midwest Generation (old Commonwealth Edison site) found airborne levels of asbestos several hundred times higher. This information was cleverly hidden in Appendix B under "Quality Control" in the skewed Illinois Attorney General's asbestos task force funded study of Waukegan Harbor sediments cited in the misleading USACE draft EA.
I request that the USACE present evidence in support of the "indirect" method of evaluating deadly microscopic airborne asbestos fibers (including amphibole fibers) over actual air sampling data of sediments dredged offshore of the City of Waukegan.
4. The USACE website, USACE staff, and the documents in support of the draft EA make statements that are mischaracterized and/or false in an apparent attempt to downplay the

significance of statistically elevated levels of dangerous microscopic asbestos fibers, including the more potent amphibole asbestos fibers.

The USACE website at <https://www.lrc.usace.army.mil/Missions/Civil-Works-Projects/Waukegan-Harbor-Dredging/> makes statements that either mischaracterize facts and/or are completely false in an attempt to downplay the significance of the statistically elevated levels of asbestos.

- a. **USACE Website Erroneous Statement #1** - Under Frequently Asked Questions the USACE website states the following: *USACE has never found high levels of contamination, including PCBs and asbestos, in the Approach Channel sand. The Approach Channel was not part of the OMC Superfund Site. The sand in the Approach Channel is similar to beach sand found all along the southern Lake Michigan coast.*

FACT CHECK: The Illinois Attorney General’s asbestos task force report conducted by the University of Illinois at Chicago’s School of Public Health states on page 1: “*The sand sampling results indicate that the concentration of asbestos structures per gram of PM10 in the beach sand at the IBSP North Unit, the lake-bottom sand at the Approach Channel to Waukegan Harbor, and the lake-bottom sand at the North Point Marina were significantly different (greater) than background areas.*”

I request that the USACE present evidence in support of their misleading statement at the public hearing.

- b. **USACE Website Erroneous Statement #2** - Under Frequently Asked Questions the USACE website states the following: “***What about the Johns Manville site and the asbestos? The Johns Manville site is located north of Waukegan Harbor along the Lake Michigan shoreline. Asbestos-containing materials were manufactured at the site. The site has been accused of being a source of asbestos in the lake and sand. The site is closed and capped. The Illinois Attorney General’s Office did a study on asbestos in beach sand, with the conclusion that Waukegan Approach Channel sand is not contaminated.***”

FACT CHECK: Nowhere in the cited study is there a claim that the Waukegan Harbor is not contaminated with asbestos. The Harbor is immediately south of the Johns-Manville Superfund Site that has spewed deadly microscopic asbestos fibers (including the more potent amphibole asbestos fibers) into Lake Michigan through a “white ditch” for over 50 years. Additionally, the bungled demolition of the old Johns-Manville manufacturing buildings created significant releases of microscopic asbestos fibers discharged at a measured rate of 14 million asbestos fibers per liter of polluted water. Hundreds and thousands of gallons of water were used during the demolition activities. Therefore, the absence of visible pieces of asbestos debris do not mean the sediments are not contaminated. The public does not breathe in chunks of asbestos; they inhale the deadly microscopic asbestos fibers. As stated above, the Illinois Attorney General’s Asbestos Task Force report conducted by the University of Illinois at Chicago’s School of Public Health finds on page 1: “*The sand sampling results indicate that the concentration of asbestos structures per gram of PM10 in the beach sand at the IBSP North Unit, the lake-bottom sand at the Approach Channel to Waukegan Harbor, and the lake-bottom sand at the North Point Marina were significantly*

different (greater) than background areas.” Waukegan Harbor is clearly contaminated with elevated levels of deadly asbestos fibers.

I request that the USACE present evidence in support of their misleading statement at the public hearing.

- c. USACE Staff Misleading Statements to the Public - In an email to Paul Kakuris, President of the Illinois Dunesland Preservation Society dated 7/19/19, USACE staff John Belcik made several mischaracterizations of the asbestos content found in Waukegan Harbor when he wrote: *Good Morning Paul, I've attached the report commissioned by the AG that is referenced on our website detailing the asbestos at IL Beach State Park. In the report they do mention dredged material used to nourish the beach at the park, where it comes from, and its asbestos content. One of the locations is Waukegan Harbor Approach channel. In short, they determine that the content of asbestos in that sand is negligible, within the limits of the typical background that is found everywhere, and doesn't pose a human health risk. You can read the report though and see their exact language since I'm paraphrasing.*

FACT CHECK: There is no such statement found in the UIC report. On page 5 of the UIC report, the authors state, “*No standards exist for asbestos levels in soil or sand and few studies have investigated urban or rural background levels or exposure from asbestos in soil or sand.*” The UIC report further states on page 1: “*This study was performed to evaluate two potential lake-bottom sources of beach replenishment sand. The study design utilized very sensitive sampling and analytical methods to determine whether asbestos structure concentrations in the sand were elevated. Background area concentrations were considered because of the sampling method’s analytical sensitivity and because inadequate information existed about ambient concentrations of asbestos in soil or sand with the use of this method.*” What the UIC report did find about concentrations of microscopic asbestos fibers found in Waukegan Harbor Approach Channel was also found on page 1: “*The sand sampling results indicate that the concentration of asbestos structures per gram of PM10 in the beach sand at the IBSP North Unit, the lake-bottom sand at the Approach Channel to Waukegan Harbor, and the lake-bottom sand at the North Point Marina were **significantly different (greater) than background area.***”

I request that the USACE present evidence in support of their misleading statement at the public hearing.

- d. The USACE Draft Environmental Assessment Makes a False Statement. It states on page 27, “*The Johns-Manville site was used for manufacturing insulating products, and included the use and on-site disposal of asbestos containing materials. Asbestos materials are alleged to have been dumped into near shore Lake Michigan, and are suspected of having migrated southward toward Waukegan Harbor. USACE acknowledges information that asbestos debris was dumped offshore and was suspected of migrating south towards Waukegan Harbor. However, the USACE then falsely claims a few sentences later that “No asbestos containing materials (i.e. materials with 1% or greater asbestos content) have ever been identified in Waukegan Harbor”. Yet on a leisurely walk on the Waukegan Shoreline in July of 2005, I personally found a large piece of friable*

asbestos debris that not only contained more than 1% asbestos, but it contained the more deadly amphibole asbestos mineral fibers; the same deadly fibers identified by the Illinois Attorney General's Office UIC report in Waukegan Harbor Approach Channel back in 2005. *The Waukegan NewsSun* took a photograph of the asbestos debris and published an article on July 7, 2005 (See Attachment D for article and photo of asbestos debris). This was public knowledge published in the local newspaper. There is asbestos-containing debris on and offshore of the Waukegan Lake Michigan shoreline.

- e. Many of the supporting documents included with the draft EA significantly and deceptively distort the risk associated with the statistically elevated levels of deadly microscopic asbestos fibers, including the more harmful and potent amphibole fibers found in Waukegan Harbor. For instance, on page 18 of the 2014 Clean Water Act Section 404(b)(1) Contaminant Determination, the document deceptively states that "*Results from the sampling events in 1997-1998 and 2001-2013 have shown no evidence of asbestos. One sample from both the 1999 and 2000 events detected a trace amount of asbestos, but not at a concentration high enough to classify it as asbestos containing material (ACM).*"

FACT CHECK: The 2014 USACE document contradicts this statement of no asbestos in the preceding paragraph when they state: "*In 2005, members of the Illinois Attorney General's Asbestos Task Force conducted a study of asbestos contamination at IBSP, where asbestos-containing materials (ACM) had been found since 1997. Twelve sediment samples were collected from each of seven locations: five beach locations and two sand sources used for beach nourishment at IBSP. Sediment from the Waukegan Harbor Approach Channel was among the potential sources evaluated. A sensitive analytical method with a very low detection limit, known as "Superfund/Elutriator," was used for the study. While asbestos fibers were detected in each of the twelve samples collected from the Waukegan Harbor Approach Channel, the detections indicated risk levels less than the USEPA benchmark risk level of one in one million.*"

I request that the USACE present evidence at the public hearing in support of their misleading statement that sampling events from 1997-1998 and 2001-2013 show no evidence of asbestos.

- f. The UIC limited risk screen referenced above that allegedly determined risk below the USEPA benchmark risk level of one in a million utilized "indirect" air sample modeling to simulate airborne exposure.

FACT CHECK: USEPA has stated the following when correlating asbestos concentrations in soil to airborne risk to the public: "*Asbestos fibers in outdoor soil, indoor dust, or other source materials typically are not inherently hazardous, unless the asbestos is released from the source material into air where it can be inhaled. If inhaled, asbestos fibers can increase the risk of developing lung cancer, mesothelioma, pleural fibrosis, and asbestosis. The relationship between the concentration of asbestos in a source material and the concentration of fibers in air that results when that source is disturbed is very complex and dependent on a wide range of variables. To date, no method has been found that reliably predicts the concentration of asbestos in air given the concentration of asbestos in the source. Additional research is ongoing to characterize this relationship.*"

I request that the USACE present evidence at the public hearing that a scientifically valid, independently peer reviewed, asbestos risk assessment has confirmed that asbestos risks in the Waukegan Approach Channel are below the USEPA benchmark risk level of one in a million.

- g. The draft EA deceptively misstates that sampling of Waukegan Harbor for asbestos followed strict sampling protocol that was used in the UIC report. The UIC analytical method used the sensitive TEM sampling and also performed quality control sampling with an independent lab. The USACE has not been following the protocol found in the UIC report and has failed to perform quality control testing on the asbestos lab results.

FACT CHECK: The USACE recently has been using a modified asbestos testing method that no longer requires a TEM microscope but instead uses a combination of TEM and PLM microscopes that cannot typically detect low levels of harmful microscopic asbestos fibers in soils and sediments. The USEPA has stated that: *“When the asbestos content of soil is low (e.g., <1% PLM), the fraction of particles that are asbestos is small, and accurate quantification is generally very difficult. Thus, the results from these methods should generally be interpreted semi-quantitatively. Sampling at multiple sites has shown that even when soils are non-detect by PLM, concentrations of asbestos in the air via ABS [activity-based air sampling] may result in unacceptable health risks.”* In addition, no quality control sampling and analysis was performed to verify the accuracy of the “modified” testing methods.

I request that the USACE present evidence at the public hearing in support of their misleading statement about Waukegan Harbor sampling and why they failed to perform Quality Control sampling

- h. The draft EA contains references to a 2017 Clean Water Act 404(b)(1) Contaminant Determination Report - Waukegan Outer Harbor, Waukegan, Illinois as a support document. Page 8 of this most recent examination of contamination in Waukegan Harbor deceptively makes the following statement: *“The Approach Channel has historically been clean, coarse sand, free of asbestos...”*

FACT CHECK: There is no evidence that the Approach Channel has been historically free of asbestos. In fact, the UIC report concluded: *“The sand sampling results indicate that the concentration of asbestos structures per gram of PM10 in the beach sand at the IBSP North Unit, the lake-bottom sand at the Approach Channel to Waukegan Harbor, and the lake-bottom sand at the North Point Marina were significantly different (greater) than background area.”*

I request that the USACE present evidence at the public hearing in support of their misleading statement that the Approach Channel has been historically free of asbestos.

Thank you for your prompt attention to my request. I look forward to your office withdrawing the flawed draft EA and/or holding a public meeting where your staff can present evidence addressing my concerns.

Cordially,

Jeff

Jeffery C. Camplin, MS, CSP, CPEA, CET
Illinois licensed asbestos professional 100-00091
Concerned Citizen of Lake County, IL

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

Attachments

- A. 1998 Illinois EPA – Mary Gade Letter RE: Dredged Material is a Regulated Waste
- B. 2000 letter from Illinois Attorney General naming five potentially responsible parties for spreading asbestos contamination along the Illinois Lake Michigan shoreline, including the Army Corps of Engineers.
- C. 2003 “Camplin Report” on Asbestos Contamination at Illinois Beach State Park
- D. 2005 Waukegan NewSun newspaper article on asbestos-containing materials found on Waukegan Beaches
- E. 2006 Illinois Attorney General’s UIC report page 24 – Explaining why the analytical method USACE used to test Waukegan Harbor sediments is not sensitive enough to detect asbestos.
- F. UIC School of Public Health Website from 2017 deceptively stating the Illinois Attorney General’s Asbestos Task Force report was still under a non-existent peer review.

Attachment A – 1998 Illinois EPA Director Mary Gade Letter stating dredged material being used for beach nourishment is a regulated waste



ILLINOIS
DEPARTMENT OF
NATURAL RESOURCES

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor • Brent Manning, Director

August 17, 1998

Mary A. Gade, Director
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Dear Director Gade: *DM*

I would like to first take the opportunity to thank you and your staff for your close coordination with the Department during our asbestos investigation at Illinois Beach State Park. Your staff provided useful information during the investigation and we will continue to rely on the expertise of Illinois EPA staff during continued work at Illinois Beach.

As you are aware, the beaches at Illinois Beach State Park are a constantly changing environment with portions of the beaches eroding at a rate of feet per year, while other areas of the beach increase at a rate of feet per year. The beaches are subject to severe weathering due to Lake Michigan currents and weather patterns. A decade ago, the Department found it necessary to develop and implement a sand management program at the Park as part of an effort to protect existing beach resources. Our sand management program involves massive efforts to stabilize the existing shore line and prevent erosion of existing beaches to a point where destruction of critical dune and swale habitat is mitigated.

One of the Department's primary methods of stabilizing beach areas involves adding nutrient sand, from lake front sources when available, to critical areas along the 6 1/2 miles of Park beaches. The Department's beach management strategy may be in jeopardy of being compromised because of the recent discovery of asbestos containing material on our beaches as well as in various Lake Michigan sand stock piles.

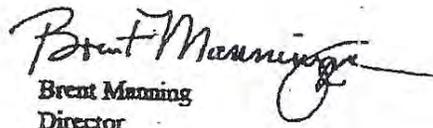
-2-

Local sand available for beach nourishment contains asbestos materials. IDNR staff have reviewed the Illinois Environmental Protection Act (Act) with regard to this issue, and it is not clear if sand containing asbestos meets the definition of "waste" as outlined in Section 3.53, if it is an "Industrial Process Waste" as defined in Section 3.17 or if it is considered a "Special Waste" as defined in Section 3.45. Our concern is answering whether sand containing asbestos is considered a "waste". If so, this may indicate that "Disposal" as defined under Section 3.08 of the Act could apply to the Department's sand management activities. If placement and/or disposal does occur per the Act, then will the Department's sand management activities be subject to requirements outlined under Ill. Admin. Code Subtitle G, Section 811? In addition, if treatment of sand to remove asbestos is required by regulation, would Section 9 (a) of the Act apply?

The Department is very anxious to resolve these regulatory concerns as soon as possible so that our nutrient sand program can continue. It would be most helpful for Illinois EPA to provide us with a waste determination with regard to the use of sand that contains asbestos materials.

Thank you for your continued support on the Illinois Beach project. We need to move promptly on this matter and appreciate your assistance. I look forward to your reply.

Sincerely,



Brent Manning
Director

cc Al Grosboll
John Comerio



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director

(217)782-3397
(TDD: 217-782-9143)

November 13, 1998

Brent Manning, Director
Illinois Department of Natural Resources
524 South Second Street
Springfield, Illinois 62701-1787

Dear Director Manning:

This letter is to respond to your August 17, 1998 letter regarding the Department's sand management program at Illinois State Beach State Park. Your concern is that the "sand available for beach nourishment contains asbestos materials." This raises the issue of whether that sand is "waste" and what regulatory requirements may be applicable.

It would appear that the sand containing asbestos materials would be a waste as an "industrial process waste" or a "pollution control waste" when removed from its original location, and would require proper management and disposal. Placing these additional asbestos materials on the Illinois State Beach would constitute a disposal of that waste, so I must recommend against it.

If you have any further questions, please contact me.

Sincerely,

Mary A. Gade
Director

cc: Al Grosboll
John Comerio

Attachment B – 2000 letter from Illinois Attorney General citing five potentially responsible parties for spreading asbestos contamination along the Illinois Lake Michigan shoreline; including the Army Corps of Engineers.

✓ cc. Steve Cairns

for Mairal paid discharge
print out that



OFFICE OF THE ATTORNEY GENERAL
STATE OF ILLINOIS

February 4, 2000

Jim Ryan
ATTORNEY GENERAL

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Agency
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Illinois Department of Public Health
535 West Jefferson Street
Springfield, Illinois 62761-0001

RECEIVED

FEB 18 2000

CHIEF LEGAL COUNSEL
DEPT. OF NATURAL RESOURCES

Re: Draft Report on Potentially Responsible Parties
for ACM at Illinois Beach State Park

Dear Counsel:

An investigation has been ongoing to attempt to determine the source and responsible parties for the asbestos containing material ("ACM") found on the beach at Illinois Beach State Park. Enclosed please find a draft report which outlines the preliminary results of the investigation. In summary, the investigation indicates there are two main sources for the ACM on the beach; they are 1) a subdivision formerly located at the north end of the Park, and 2) sand obtained from a ComEd dredge pile which contained ACM used to replenish the sand on the Park beach. We have identified five PRPs, which are, Johns Manville, ComEd, the City of Waukegan, the Army and IDNR.

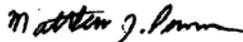
Your agencies most likely have information pertinent to the investigation which is not included in the enclosed draft report. Please provide your agency's input regarding the source of the ACM, the PRPs and any other relevant information. We would appreciate receiving any information you have to supplement the draft report within 30 days.

016751

February 4, 2000
Page 2

Thank you very much for your attention to this matter. If you have any questions, please feel free to call myself or Elizabeth Wallace, the Assistant Attorney General assigned to this matter.

Very truly yours,



Matthew J. Dunn, Chief
Environmental Enforcement/Asbestos
Litigation Division
188 W. Randolph, 20th Flr.
Chicago, Illinois 60601
(312)814-2521

016752

Attachment C – The 2003 “Camplin Report” findings on asbestos contamination at Illinois Beach State Park that forced the Illinois Attorney General to form the Asbestos Task Force and subsequent UIC asbestos study.

Review of Current Asbestos Contamination Concerns

***Illinois Beach State Park
State Dedicated Nature Preserve and Federal Critical Habitat
Johns-Manville Superfund Site #2
Midwest Generation Fishing Pier Area
Proposed Waukegan Outdoor Sports Complex Site
Lake Michigan***

Waukegan, Zion, and Winthrop Harbor Illinois

Prepared in response to a request from
The Illinois Dunesland Preservation Society

June 13, 2003

Conducted by:

Jeffery C. Camplin CSP, CPEA

Introduction/Background

The following report was prepared in response to an initial investigation of suspected-asbestos containing materials found in the Midwest Generation Pier public fishing area and parking lot at the Greenwood Ave and the lakefront commonly referred to as Johns-Manville Superfund Site #2. The investigation was initiated by a call from Mr. Paul Kakuris, President of the Illinois Dunesland Preservation Society¹ located in Zion, IL to investigate and obtain a bulk sample of suspected asbestos containing materials. The Johns-Manville Superfund Site #2 area is located at the end of Greenwood Ave and the Lakefront in northeast Waukegan. The site was surrounded on the south side by a Midwest Generation electrical plant and warm water discharge, on the east by Lake Michigan, and on the north and west by the former Johns-Manville manufacturing plant and current Superfund Site. A visual inspection of the area conducted on April 24, 2003 revealed multiple pieces of friable asbestos in the fishing area and also in adjacent Johns-Manville U.S.EPA Superfund Site #2 areas that had undergone recent remediation (summer 2002). Friable is a regulatory term that means an asbestos containing material can crumble or be reduced to powder by hand pressure and easily release asbestos fibers into the air. Asbestos is predominately an airborne hazard and can cause health hazards including lung cancer, mesothelioma, and asbestosis. A bulk sample of the suspected asbestos-containing material was obtained at Johns-Manville Superfund Site #2 near the Midwest Generation Fishing Pier public beach and was subsequently found to have 50% chrysotile asbestos in it.²

The majority of the asbestos containing materials visible on the surface of the Johns-Manville Superfund Site #2 which includes the Midwest Generation Pier public fishing area) and elsewhere on Illinois Beach State Park and State Dedicated Nature Preserve and Federal Critical Habitat were originally manufactured as non-friable materials. These cement, roofing, and friction products do not readily release asbestos fibers unless mechanical actions or other forces act upon them. The asbestos materials found at these sites have been exposed to these forces. Asbestos is a health hazard when asbestos fibers become airborne. The U.S. EPA found that the asbestos contamination located in and around the Johns-Manville Waukegan Superfund Site have become deteriorated from exposure to the outdoor elements and are no longer a non-friable material. The U.S. EPA stated in response to a Johns-Manville claim that the asbestos chunks on the surface of the Johns-Manville Superfund Site in Waukegan are non-friable, "THE PRIMARY BONDING AGENTS USED AT THE SITE ARE SILICATES AND GYPSUM (CEMENT) AND ASPHALT. IT IS WELL-KNOWN THAT SUNLIGHT AND MOISTURE, AND PARTICULARLY FREEZING MOISTURE, DETERIORATE THESE MATERIALS. THE SILICATE AGENTS ARE ALSO HIGHLY ALKALINE AND SUSCEPTIBLE TO CHEMICAL ATTACK BY ACID RAIN AND GROUND WATER. THE PRODUCTS MANUFACTURED AT THE SITE WERE OF COURSE DESIGNED TO BE WEATHER-RESISTANT; NEVERTHELESS, THEY ARE NOT WEATHER-PROOF, AND DETERIORATION TO A FRIABLE CONDITION WILL EVENTUALLY OCCUR. AS FOR A "MEANINGFUL" TIME FRAME, THE WRITER HAS OBSERVED CEMENT-BONDED ASBESTOS BOARD LYING ON THE SURFACE AT OTHER SITES IN SUCH A ROTTED CONDITION THAT ANY DISTURBANCE WOULD CAUSE THE APPARENT

¹ Illinois Dunesland Preservation Society. P.O. Box 466, Zion, IL 60099, (312)-332-3377

² Camplin Environmental Services, Inc., "Asbestos Testing Report at Site #2", April 29, 2003.

STRUCTURE TO VANISH; YET THESE SCRAPS HAD BEEN EXPOSED ON THE SURFACE FOR NO MORE THAN 2 TO 5 YEARS. IT IS ALSO QUITE POSSIBLE THAT A SIGNIFICANT DEGREE OF THIS STRUCTURAL BREAKDOWN HAD OCCURRED DURING THE UPFREEZING PERIOD, EVEN BEFORE EXPOSURE TO AIR AND SUNLIGHT”³ I have personally observed similar conditions of visible asbestos materials at these sites in walkthroughs conducted in April and May of 2003.



Asbestos debris that has started to breakdown on Illinois Beach.

Photo by Jeff Camplin 2003

Mr. Kakuris provided additional documentation regarding the Johns-Manville Superfund Site, Army Corp of Engineers dredging activities, and Illinois Beach State Park asbestos cleanup activities from 1998. These reports indicated obvious gaps in how the asbestos contamination issues had been addressed by the U.S. EPA, Illinois EPA, Army Corp of Engineers, Illinois Department of Natural Resources, Illinois Department of Public Health, Johns-Manville, Midwest Generation (Commonwealth Edison), Waukegan Park District, and other state and local agencies. Investigation into other related site documents increase concern regarding the scope and magnitude of existing and ongoing visible and microscopic asbestos contamination to the Superfund Sites, public areas, and Lake Michigan. This report is by no means a complete or comprehensive final evaluation of the subject properties. A series of more in-depth reports are currently being worked on addressing analytical methods, demolition activities, remediation

³ USEPA Superfund Record of Decision: Johns-Manville Corp., EPA/ROD/R05-87/048-1987
<http://www.epa.gov/superfund/sites/rods/fulltext/r0587048.pdf>.

techniques, and chemical contamination related to this area. An initial report on my findings and concerns at these sites is as follows.

Executive Summary

I have found the visible surface and emerging subsurface asbestos materials at the Midwest Generation Pier public fishing area of the Johns-Manville Superfund Site #2, the Illinois Beach State Park and State Dedicated Nature Preserve and Federal Critical Habitat, and Lake Michigan in a deteriorated, friable condition. Despite multiple investigations and millions of dollars in remediation activities by public and private entities, asbestos continues to reappear throughout the subject sites. ***It is my opinion that the visible asbestos in the above referenced areas is regulated asbestos material subject to enforcement under State of Illinois and Federal asbestos regulations. These asbestos-contaminated areas should be immediately isolated from the public. Only authorized personnel should be allowed into the areas to perform additional investigation. The locations and quantities of visible and microscopic asbestos contamination on the surface and subsurface of both land and water areas of the sites must be identified. The sources of this visible and microscopic asbestos contamination should be identified and included in the overall remediation plan for the sites.***

I have also found that the public access beach on Lake Michigan east of the Johns-Manville U.S.EPA Superfund Site #2 (including the public access fishing areas near the Midwest Generation warm water channel beach) have continually reoccurring visible and microscopic asbestos contamination. This microscopic asbestos surface contamination is of major concern to public health due to secondary asbestos exposures at home when beach patrons, their pets, and park staff bring microscopic contamination with them off-site. The U.S. EPA issued guidance information on May 21, 2003 regarding potential microscopic asbestos contamination of vermiculite insulation used in homes. The guidance recommends that homeowners avoid contact with the asbestos-contaminated material stating, “Any disturbance has the potential to release asbestos fibers into the air.” The U.S. EPA further recommended, “Children should not be allowed to play in an attic with open areas of vermiculite insulation⁴.” No such recommendations have been made to the public regarding the microscopic asbestos contamination on the beaches and in Lake Michigan water of Illinois Beach State Park. ***Multiple studies are being performed at other locations by the National Institute for Occupational Safety and Health (NIOSH)⁵ and the Mine Safety and Health Administration (MSHA)⁶ regarding a concern to public health related to asbestos contamination being brought home to families from off-site asbestos-contaminated areas. No evaluation of microscopic asbestos contamination to patrons, their pets, and park staff have been conducted by any agency involved with these sites. No recommendations or warnings have been made to the public regarding microscopic asbestos contamination found in the water and sand at Illinois Beach State Park.***

⁴ USEPA Newsroom, “National Consumer Awareness Campaign Launched on Vermiculite Insulation Used in Some Home Attics,” May 21, 2003 www.epa.gov/newsroom/headline2_052103.htm.

⁵ NIOSH. “Protect Your Family, Reduce Contamination at Home”, DHHS (NIOSH) Publication number 97-125 www.cdc.gov/niosh/thttext.html.

⁶ *Federal Register*, Volume 67, Number 61, 30 CFR Parts 58 and 72, Measuring and Controlling Asbestos Exposure, (March 29, 2002) p. 15134-15138.

The water of Lake Michigan has been polluted with excessive asbestos fibers and other toxic contaminants from the Johns-Manville Industrial Canal water discharges and other sources over the last 80 years. This documented asbestos pollution occurs adjacent to the public beach, public fishing area, and Waukegan drinking water intake. A report from as early as 1977 found elevated asbestos fibers in the waters of Lake Michigan.⁷ This same report stated asbestos had been identified in the Chicago area Lake Michigan potable water intakes in the early 1960's. These tests followed the lake currents from the north near Zion, Illinois in a southerly direction down to Burns Harbor, Indiana. The current elevated asbestos fiber contaminations allowed to be discharged into Lake Michigan from the Johns-Manville industrial canal unfortunately does not evaluate all carcinogenic and disease-causing asbestos fibers. Only asbestos fibers at or above 10 microns are counted and allowed by U.S. EPA to be dumped into Lake Michigan at up to 7 million fibers per liter of water. A report from the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR) state that asbestos has been found to cause disease at fiber lengths greater than or equal to 5 microns.⁸ Carcinogenic and disease-causing asbestos fibers between 5 and 10 microns are not measured and allowed to be discharged into Lake Michigan at any amount. ***On opening week of the Illinois Beach in May, 2002, the U.S. EPA documented asbestos-contaminated water discharged from the Johns-Manville Industrial Canal into Lake Michigan at over 21 million asbestos fibers (over 10 microns in size only) per liter of water.⁹ This violation measurement was over 3 times the maximum asbestos fiber levels allowed by an expired U.S. EPA discharge permit. Yet no violation was issued by U.S. EPA or Illinois EPA. There was no notification to the public and beach patrons were allowed to swim and sun in an area immediately adjacent to this violation measurement site. There have been no studies by any agency involved with these sites regarding the health risks of microscopic asbestos-contaminated water washing onshore resulting in continuous recontamination of the public beaches and fishing areas. No studies have been conducted on the fish living in the asbestos-contaminated water and whether eating these fish is a health threat to the public.***

Asbestos-contaminated sand has been dredged from Lake Michigan and dumped on the Illinois Beach State Park as beach replenishment material. In 1998, the Illinois EPA classified the dredged asbestos-contaminated sand as a special waste.¹⁰ To date, the asbestos-contaminated sand piles remain just south of the North Point Marina on IDNR property at Illinois Beach State Park. No actions have been taken on this waste material and the area is currently open to the public. Dredging of the asbestos-contaminated lake bottom continues as of the writing of this report. ***The asbestos-contaminated dredge piles should be isolated from the public and properly disposed of as a special waste. Dredging the asbestos-contaminated lake bottom should cease until the sources, location, and quantities of off-shore asbestos contamination is identified.***

⁷ McMillan, Lilia, Roy Stout, and Benjamin Willey. "Asbestos in Raw and Treated Water: An Electron Microscopy Study", Environmental Science and Technology, April 1977, vol. 11 pp.390-394

⁸ ATSDR. "Public Health Statement for Asbestos." CAS# 1332-21-4. September, 2001
www.atsdr.cdc.gov/toxprofiles/phs61.html.

⁹ U.S. EPA. "Water Discharge Permits Detailed Reports." NPDES Permit# IL0069809.
http://oaspub.epa.gov/enviro/pcs_det_reports.pcs_tst?npdesid=IL0069809&npvalue=1&npvalue=2&npvalue=3&npvalue=4&npvalue=5&rvalue=13&npvalue=6&npvalue=7&npvalue=9&npvalue=10&npvalue=11.

¹⁰ Illinois EPA letter from then Director Mary Gade to Brent Manning, Director of the Illinois DNR, November 13, 1998.

The risk assessment conducted for the Waukegan Park District at the proposed sports complex site did not evaluate all of the expected toxic exposures, expected conditions, or the representative population expected to use the site. Consider if the sports complex already existed. What scrutiny would be conducted by the public if a large electrical power plant and asbestos waste disposal site was proposed to be constructed immediately next to the sports complex? What type of evaluations and assurances would be demanded by the public? The risk assessment study excluded ozone and most carcinogenic and disease-causing asbestos fibers less than 10 microns. ***The risk assessment conducted at the proposed sports complex site only evaluated risks to a healthy, 90 pound child. A more thorough risk assessment of growing “at risk” children exposed to all possible toxic materials under representative conditions should be conducted.***

Site History

The subject site consists of the Illinois Beach State Park, State Dedicated Nature Preserve and Federal Critical Habitat, the former Johns-Manville Manufacturing site, the Johns-Manville Superfund Site (the original site and six additional locations), the Midwest Generation Pier public fishing area of Johns-Manville Superfund Site #2, leased by the Illinois Department of Natural Resources, and Lake Michigan. The site runs along the Lake Michigan shoreline from the northeastern boundary of the city of Waukegan extending approximately 6.5 miles north to the Illinois-Wisconsin state line.

Former Johns-Manville Asbestos Plant and Superfund Area – The former Johns-Manville manufacturing facility was located at 1871 Pershing Road, Waukegan IL. The Johns-Manville asbestos manufacturing facility was constructed in 1919. The Johns-Manville asbestos manufacturing operations began in 1923 and ceased in 1985 when they filed for Chapter 11 bankruptcy. Asbestos products manufactured at the site included low temperature pipe insulation, brake linings and pads, packings, insulation cements, roofing materials, rag felt and paper, magnesia products, floor tile, shingles and transite cement pipe and sheeting. The site covers approximately 300 acres of land. The site is bordered by Lake Michigan and the Illinois Beach State Park, both of which are used for recreation. Johns-Manville ceased operations onsite in 1998 and began demolition of the manufacturing buildings in 2000.

According to the U.S.EPA,¹¹ the Johns-Manville Superfund Site is an approximately 150-acre asbestos disposal area. Approximately 3 million cubic yards of off-specification products and wastewater sludge containing asbestos and, to a lesser degree, lead, chromium, and thiram, were disposed in the eastern area of the 300-acre Johns-Manville property. The disposal area is approximately 25 to 30 feet above grade. In 1988, the U.S. Environmental Protection Agency (U.S. EPA), Illinois Environmental Protection Agency (IEPA), and Manville Corporation entered into a Consent Decree (CD) to conduct the Remedial Design and Remedial Action (RD/RA) at the site. The cleanup activities that were implemented included placement of a 24-inch soil cover with vegetation over all dry waste areas, paving of two parking lot areas contaminated with asbestos, resurfacing site roadways with a 24-inch cover, and providing rip-rap along all operating wastewater treatment ponds. Construction activities began in November, 1988 and after two enforcement actions, including collection of a \$38,000 stipulated penalty (for

¹¹ U.S. EPA Region 5 Superfund Division. NPL Fact Sheets for Illinois: Johns-Manville Corp. EPA ID#005443544, January 2003. www.epa.gov/R5Super/npl/illinois/IL005443544.htm.

late submission of documents) and a \$165,000 civil penalty (for improper grading activities), the RA proceeded smoothly until its completion in August, 1991. Additional work was included in the RA when further contamination was discovered during site clearing activities. Ultimately, approximately 3 million cubic yards of asbestos-containing waste that was spread over approximately 150 acres was provided with a cover which was supposed to eliminate the potential for releases of asbestos to the air. The total cost of the RA was approximately \$20,000,000, including the additional work. Currently, Operation and Maintenance (O & M) activities, such as soil cover maintenance and groundwater monitoring, continue at the site. Contingency plans are in place in case the soil cover fails or the groundwater or surface water become contaminated with levels that exceed applicable standards. The first Five-Year Review for the site was completed on January 21, 1999.

Since 1998, six additional areas, all of which contained asbestos-containing material (ACM) were discovered outside of the Johns-Manville fence line. In 2002, the largest of the six sites was cleaned up under an EPA-funded removal action after concerns were raised by the Illinois Dunesland Preservation Society. Plans have been made to clean up the five additional sites, but actual cleanup work has not yet begun.

U.S. EPA issued an Explanation of Significant Differences in September, 2000 which requires the closure of the former wastewater treatment ponds (put out of service in 1998) by January 1, 2004. The lagoon system is still connected to Lake Michigan through an effluence pipe.

Illinois Beach State Park and Nature Preserve - Illinois Beach stretches for six and a half miles along the sandy shore of Lake Michigan in Northern Illinois. The Illinois Department of Natural Resources states the 4,160-acre site provides the public with an opportunity for swimming, boating, picnicking, hiking, fishing, and camping¹². In 2002 over 2.6 million people visited the park. It is the most visited State Park in Illinois and the 11th most visited park in the United States.

In 1948, the state acquired the first parcels of what is now Illinois Beach State Park. In 1950, the Illinois Dunesland Preservation Society was established to protect the natural qualities of the area, and through its efforts and the efforts of the Department of Conservation the area south of Beach Road was dedicated in 1964 as the first Illinois nature preserve. The northern unit, from the Commonwealth Edison power plant to the Wisconsin border, was acquired between 1971 and 1982.

Illinois Beach State Park encompasses the only remaining beach ridge shoreline left in the state. A portion of the south unit of the park was dedicated in 1964 as the first Illinois nature preserve. The nature preserve contains more than 650 species of plants, including a multitude of colorful wildflowers. The Dead River winds through the preserve creating a unique wetland habitat for many endangered species. The Dead River is a stream that is blocked by sandbars much of the year forming an elongated pond. When the water finally rises high enough, it breaks through the sandbar and drains the surrounding marshes.

In 1998, friable asbestos washed up on the beach area of the park. A remediation project was initiated to remove visible asbestos. Air testing performed upon completion of the remediation activity indicated the beach area was safe to reopen to the public. A memo issued by an EPA toxicologist in August of 1999 was critical of air testing as not being sufficient for a public

¹² Illinois Department of Natural Resources. Website information
<http://dnr.state.il.us/lands/landmgt/PARKS/R2/ILBEACH.HTM>.

health risk assessment¹³. The beach is currently open and under an ongoing maintenance program where asbestos trained park personnel perform periodic surveillance of the beach and remove visible asbestos as it washes onshore. Due to recent budget constraints there is only one Park employee who has part-time responsibility for the surveillance of the 6.5 miles of asbestos-contaminated beach.

Johns-Manville Superfund Site #2 including the Midwest Generation Pier Public Fishing Area – In 1991, the Illinois Department of Conservation began a process to lease a popular fishing pier and beach area known as Midwest Generation Pier. The fishing area is located at Lake Michigan shoreline at the end of Greenwood Ave. in northeast Waukegan. The leased area consists of the Greenwood Ave. access road, parking area, beach, pier, Midwest Generation high velocity warm water discharge, and Lake Michigan shoreline. The area is sandwiched between the Johns-Manville Superfund Site to the north and Midwest Generation power plant warm water discharge to the south and west, and Lake Michigan to the east.

Prior to leasing the property from Johns-Manville and Midwest Generation (Commonwealth Edison) the property had visible friable asbestos removed. In 2002, the Greenwood Ave road entrance and parking area were included in Superfund remediation activities due to the presence of visible surface and subsurface asbestos contamination. This is the site where visible friable asbestos has currently resurfaced prompting this more expanded report.



Photo by Jeff Camplin 2003

¹³ U.S. EPA memo from EPA Toxicologist Arunas K. Draugelis to Brad Bradley, Region 5 Superfund Project Manager, March 21, 2000.

Would you place your beach towel here? If the piece of asbestos was picked up would you ignore the microscopic asbestos contamination and still place a towel down here? Should children play here?

Summary of Asbestos Contamination Concerns

There are several concerns that arise regarding asbestos contamination at the Johns-Manville Superfund Site and adjacent public areas. There are many agencies and private entities involved with the sites; each with their own concerns and agenda. **This fragmented approach has resulted in an inadequate identification of the scope of asbestos contamination as it relates to public health.** The Inspector General for the U.S. EPA found that a similar fragmented approach taken by the U.S. EPA, State and local agencies at an asbestos Superfund Site in Libby, Montana. This U.S. EPA Inspector General's report from 2001 stated "*These barriers prevent EPA from sufficiently addressing asbestos-contaminated vermiculite in Libby. EPA's efforts were hampered by fragmented authority and jurisdiction within EPA and between it and other agencies*"¹⁴." The Libby Montana site is now being addressed with public health and safety as the number one goal. A similar approach is needed for the Johns-Manville Superfund Sites, Illinois Beach State Park beaches, State Dedicated Nature Preserve and Federal Critical Habitat areas. These asbestos contamination concerns are further heightened due to the uniqueness of the areas involved in this report. The combination of a former asbestos manufacturing complex, an existing industrial area, multiple Superfund Sites, public fishing areas, public beaches and swimming areas, endangered species nature preserve, Lake Michigan watershed, potable water supply, and proposed outdoor park district sports complex requires a more comprehensive evaluation of existing and reoccurring asbestos contamination and other toxic exposures in the area to protect public health. A summary of concerns is as follows:

- **Friable asbestos continues to re-contaminate the Superfund site #2 including the Midwest Generation Pier fishing area, State Park beach area, and Federal dedicated nature preserve, and Superfund Site #2 that has recently undergone remediation designed to last for several decades.**
 - Visible friable and microscopic asbestos continues to contaminate the public areas from existing surface and subsurface contamination, old Johns-Manville asbestos dump areas, dredging activities, and asbestos-contaminated water discharges from the Superfund Sites.
 - On June 6, 1987 a Record of Decision (ROD) was issued on the Johns-Manville Superfund Site. The ROD stated "Dikes will be constructed at the depressed area along the north side of the industrial canal to prevent industrial canal water from migrating offsite."¹⁵ The dike was not constructed and asbestos-contaminated water from the industrial canal continues to migrate offsite into the Illinois Beach State Park nature preserve, Dead River, and eventually Lake Michigan. This was visually confirmed and photographed on May 19, 2003. The dike was not constructed at the request of the Illinois Department of Natural Resource.

¹⁴ U.S. EPA Office of Inspector General. "Report – EPA's Action's Concerning Asbestos-Contaminated Vermiculite in Libby, Montana." 2001-S-7, March 31, 2001. www.epa.gov/region8/superfund/libby/libbyig.html.

¹⁵ USEPA Superfund Record of Decision: Johns-Manville Corp., EPA/ROD/R05-87/048-1987 <http://www.epa.gov/superfund/sites/rods/fulltext/r0587048.pdf>

However, an alternate plan to prevent asbestos-contaminated water from migrating out of the industrial canal of the Johns-Manville Superfund Site has not been addressed for over 15 years. The industrial canal remains in operation in violation of the NPDES permit and Federal Consent Decree.

- In May, 1988, the U.S. EPA toured the Midwest Generation Pier fishing area and discovered asbestos-containing transite pipe, roof shingles, and corrugated siding protruding from the ground.¹⁶
- On October 1, 1990, an asbestos complaint was filed with the Illinois EPA at the Greenwood Ave fishing pier where friable asbestos was found.¹⁷ An investigation by the IEPA revealed 70% asbestos containing materials in the fishing area. The resulting report from December 27, 1990 states that Commonwealth Edison had been aware of the friable asbestos contamination since 8/9/90. The report states that the Johns-Manville investigation of the site recorded pieces of asbestos pipe being pulled out of the water by a swimmer at the park. The report went on to state that Johns-Manville had previously had the area cleaned prior to the complaint being filed. The report commented on the clean-up initiated by Johns-Manville by stating, “It apparently was not successful, since a lot of the material was visible along the shore lines...”¹⁸ Follow up inspections by the EPA and State agencies found asbestos contamination still existed.
- In 1991, the Illinois Department of Conservation was investigating leasing the Greenwood Avenue Pier fishing area (now called the Midwest Generation Fishing Pier) from Commonwealth Edison. A December 23, 1991 walkover of the site by the Illinois Department of Conservation and Illinois EPA reported, “We found the site surprisingly clean and did not find any transite pipe or other asbestos containing materials.”¹⁹ Asbestos contamination currently exists in this area as of early June, 2003.
- In February, 1998 the Illinois Department of Natural Resources reported suspected asbestos on the beach of Illinois Beach State Park and Midwest Generation Pier fishing area. A sweep of the beach uncovered an 18” asbestos pipe and concrete with asbestos floor tile adhered to it. A total of 2 cubic yards of asbestos contamination weighing one to two tons was removed from the Illinois Beach State Park and Midwest Generation Pier shore line.²⁰ Visible friable and microscopic asbestos contamination is still present in Illinois Beach State Park beaches, State Dedicated Nature Preserve and Federal Critical Habitat, and Johns-Manville Superfund Site #2 which includes the Midwest Generation Pier fishing area as of May, 2003.

¹⁶ Newspaper article in The NewsSun (Lake County Illinois), “Dunesland Society Blasts EPA Work at Fishing Pier.” July 6-7, 2002, p.A1.

¹⁷ IEPA Complaint Receipt & Report Form filed by Tim Gackle, Industrial Hygienist, GLNTC on October 1, 1990.

¹⁸ Illinois EPA memo from Chris Kallis to Johns-Manville on December 21, 1990 regarding complaint #3094.

¹⁹ Illinois Department of Conservation memorandum from Covey Campbell to Gary McCandless on December 26, 1991.

²⁰ Hansen Engineering report to Illinois Department of Natural Resources, “Sampling for Asbestos Material Oversight of asbestos removal activities – Illinois Beach State Park.” Volume I, May 1998.

- In November of 1998, the Illinois Department of Natural Resources requested an interpretation as to whether asbestos-contaminated sand dredged locally offshore should continue to be dumped on the Illinois Beach State Park beaches as beach nourishment.²¹ The Illinois EPA Director responded stating, “It would appear that the sand containing asbestos materials would be a waste as an “industrial process waste” or “pollution control waste” when removed from its original location, and would require proper management and disposal.”²² No actions have been taken by any agency to address the previous dumping of asbestos-contaminated sand waste on the public beaches. A large, dredged pile of asbestos-contaminated sand has been abandoned at the north end of the park for over 5 years. The area is not secured and open to the public. A sign warns the public that visible asbestos should not be disturbed. The sign however does not warn the public not to breathe the microscopic asbestos fibers present in the sand. There is no documentation indicating whether the visible and microscopic asbestos-contaminated dredging waste will ever be addressed.
- On August 24, 1999, a U.S. EPA toxicologist identified and documented friable and non-friable asbestos contamination near the Johns-Manville Superfund Site #2 Midwest Generation pier fishing area. A March 21, 2000 memo issued by U.S. EPA Region 5 Toxicologist Arunas K. Draugelis to Brad Bradley, the U.S. EPA Superfund Site project manager stated, “In this area by Lake Michigan with strong winds and undisturbed conditions, you would expect not to find any asbestos fibers in the air samples but the material is still there and the risk associated with asbestos is still there.” The asbestos air testing of the beach areas in 1998 was during March under windy and damp conditions. Mr. Draugelis concluded his memo by stating, “In conclusion, after inspecting Site 2 and with my knowledge of asbestos-related health hazards, I feel that the draft Risk-Assessment of the Johns-Manville Site #2 has not properly assessed the risk to people who would use the area.” No adjustments to the asbestos air testing methods or risk assessment protocol have occurred since this statement was made by the U.S. EPA toxicologist. It is my opinion that none of the airborne asbestos testing is representative of a small child’s exposure building a sand castle or being burying in asbestos-contaminated sand on a hot, dry summer day at the beach.
- A March, 2002 risk assessment report conducted by the Waukegan Park District for the proposed sports complex on the site of the old Johns-Manville asbestos manufacturing plant identified visible asbestos contamination on Greenwood Ave., the Midwest Generation Pier parking area, adjacent Midwest Generation property, the Illinois Beach State Park shoreline, and contaminated sand piles dredged by Midwest Generation currently stored on their site. Remediation of some of the site was

²¹ Illinois Department of Natural Resources letter to IEPA Director Mary Gade, August 17, 1998.

²² Illinois EPA letter from then Director Mary Gade to Brent Manning, Director of the Illinois DNR, November 13, 1998.

conducted in May to September, 2002. Significantly, more asbestos was identified during the remediation. Upon completion of the remediation, the site was stated to be clean and safe to reopen by the U.S. EPA and State agencies. An October 9, 2002 letter from the U.S. EPA regarding the Johns-Manville Superfund Site 2 cleanup of asbestos (Midwest Generation Pier area) states, "The U.S. EPA believes the removal action has eliminated the asbestos hazard and that the subsequent placement of clean fill over the site has significantly reduced the imminent and substantial threat to public health from residual contamination on the site."²³ A June 10, 2003 letter from William Muno, Director of Region 5 Superfund Division to Mr. William Child, Chief of Bureau of Lands, Illinois Environmental Protection Agency Mr. Muno stated, "As all the asbestos material exceeding our action level of 1% have been removed from Site 2, we consider our removal actions complete."²⁴ There is currently visible, friable asbestos heaving out of this area from below the surface as identified by a site inspection conducted on April 24, 2003 by Camplin Environmental Services, Inc.

- Surface water testing of Lake Michigan water off the shore of Illinois Beach State Park by an Illinois Department of Natural Resources consultant (Hansen Engineering) identified asbestos fibers below detection limits in 1998.²⁵ Yet the U.S. EPA continues to allow asbestos-contaminated water to be released from the Johns-Manville Superfund Sites industrial canal through a discharge pipe into Lake Michigan at up to 7 million asbestos fibers (**not counting carcinogenic and disease-causing asbestos fibers below 10 microns**) per liter of water. This is well above existing measured asbestos fiber contamination levels in the lake and adjacent beach swimming areas as identified in U.S. EPA test reports. Why are carcinogenic and disease-causing asbestos fibers allowed to be dumped into Lake Michigan near a public beach, public fishing area, and City of Waukegan drinking water intake at any level?
- On May 30, 2002, waste water from the Johns-Manville Superfund Sites industrial canal discharge pipe exceeded asbestos fiber concentrations allowed by an expired discharge permit at over 21 million fibers per liter. This violation measurement exceeds the permit by over 14 million fibers per liter of water.²⁶ This occurred during the opening week of the Illinois Beach State Park beach which is immediately adjacent to the Lake Michigan discharge pipe from the Johns-Manville Superfund Site industrial canal. The Waukegan public beach is in close proximity to the south of the violation measurement. **No violation** was issued by the

²³ U.S. EPA letter from William E. Muno, Director, Region 5 Superfund to Mr. Paul Kakuris, President of the Illinois Dunesland Preservation Society on October 9, 2002.

²⁴ Letter from William Muno, Director of Region 5 Superfund to Bill Child, Chief of IEPA Bureau of Land

²⁵ Hansen Engineering report to Illinois Department of Natural Resources, "Sampling for Asbestos Material Oversight of Asbestos Removal Activities – Illinois Beach State Park." Volume I, May 1998.

²⁶ U.S. EPA. "Water Discharge Permits Detailed Reports." NPDES Permit# IL0069809.

http://oaspub.epa.gov/enviro/pcs_det_reports.pcs_tst?npdesid=IL0069809&npvalue=1&npvalue=2&npvalue=3&npvalue=4&npvalue=5&rvalue=13&npvalue=6&npvalue=7&npvalue=9&npvalue=10&npvalue=11

Illinois EPA or U.S. EPA. No follow-up investigation for asbestos contamination was conducted by any agency on the public beach areas. The beach and lake areas were not closed and the public was not notified of the violation measurement.

- On April 24, 2003, visible, friable materials containing 50% asbestos were identified in the recently remediated Johns-Manville Superfund Site #2. Friable, fractured and weathered asbestos waste products were identified in the Midwest Generation Pier warm water channel public fishing area which had been previously evaluated in 1991 and 2002 and stated to be clear of visible asbestos by U.S. EPA, Region 5 Superfund Division Director William Munro.
- In early May, 2003, a major brush fire in the Illinois Beach State Park exposed several acres of contamination by friable, fractured, and weathered asbestos waste debris which was previously unidentified. This area is in close proximity to the public beach, fishing pier area, and proposed sports complex site.



Warning signs advise that park headquarters should be contacted if asbestos is found. Could you recognize asbestos? Could you see the microscopic asbestos that is present? Photo by Jeff Camplin 2003

- Warning signs at the Illinois Beach State Park alert the public that the beach may contain visible asbestos. The visitors are advised not to pick

up asbestos and contact the park staff for cleanup. There is, however, no advisory near the sign describing what the asbestos looks like. Many visible pieces of asbestos have become ground, abraded and rounded by the surf causing the asbestos to appear similar to other rocks on the shoreline. A typical park patron would not be able to identify visible asbestos from other beach rocks. There is no warning that decontamination of microscopic asbestos fibers may be necessary. There is no warning regarding microscopic asbestos contamination of the beaches or lake water. This surf action also generates microscopic asbestos fibers to be released on the beaches and in the waters of Lake Michigan. There are no recommendations for how beach patrons should decontaminate themselves, their belongings, or pets to avoid potential secondary asbestos contamination and exposure from beach sand brought into their vehicles or homes.



Which are rocks and which are asbestos?

Photo by Jeff Camplin 2003

- Park staff has been reduced due to state budget shortfalls. One employee is now responsible for visually inspecting over 6.5 miles of beach for visible asbestos. This is only one of many duties the employee performs. A review of the ongoing beach cleanup program is necessary due to the large amount of existing friable asbestos continually washing up on the beach and fishing pier areas. This program does not address microscopic asbestos cleanup of the beaches.

the U.S. EPA stated Site #2 was clean. In June, 2003 asbestos is still visible in and around Site #2. When will the full scope of asbestos contamination be investigated in this public access area?

- On October 9, 2002, Mr. William E. Muno, Director of the USEPA Region 5 Superfund Division stated in a letter to Mr. Paul Kakuris, President of the Illinois Dunesland Preservation Society that, "Removal actions are intended to be flexible and able to adjust to changing site condition, therefore U.S. EPA does not consider the management or cleanup of this site to be haphazard or inappropriate." Mr. Muno was speaking about the remediation of asbestos contamination at Site #2. Apparently more flexibility will be required for the future asbestos contamination removal actions in and around Site #2.
- There are no studies of the amounts of microscopic carcinogenic and disease-causing asbestos fibers that have washed upon on the beach from the lake water contamination or that were dumped on the beach or near shore as beach replenishment with asbestos-contaminated dredge material. **The conversion of microscopic asbestos fibers from the contaminated Lake Michigan water to the beach as a health risk has not fully been addressed by any study.**
- There are no studies regarding secondary asbestos exposures to beach visitors when microscopic carcinogenic and disease-causing asbestos fibers is taken home with them from beach contamination on clothes and belongings.
- There is no studies to indicate why asbestos-contaminated water from the Johns-Manville effluence pipe continues to have the potential to dump asbestos fibers above NPDES violation measurements of an expired waste water discharge permit (NPDES) from the Johns-Manville Superfund Site Industrial Canal.
- There are no studies to determine alternate dike requirements for preventing the asbestos-contaminated water from the Johns-Manville Superfund Site industrial canal from migrating off-site into the State Dedicated Nature Preserve and Federal Critical Habitat and Lake Michigan. **The dike that is required by the Federal Consent Decree was never constructed and is also in violation of the NPDES permit.**
- There have been no adjustments to the asbestos risk assessment air sampling methodologies which were found by a Region 5 U.S. EPA toxicologist to be insufficient for using in an asbestos public health risk assessment at the sites.
- There have been no studies into the damage caused to the nature preserve from contamination migrating from the Johns-Manville Superfund Site into the Illinois Beach State Park State Dedicated Nature Preserve and Federal Critical Habitat. An oily sheen can be observed in the Nature Preserve water that connects directly with the Johns-Manville Industrial Canal in violation of the Consent Decree and NPDES permit. Trees have been observed dying immediately north of the Johns-Manville Superfund

Site Industrial Canal breach in the State Dedicated Nature Preserve and Federal Critical Habitat.



Fish swim near shore in the Midwest Generation Fishing Pier Beach. Photo by Jeff Camplin 2003.

- No current studies have been conducted of the potential damage to the fish and vegetation in Lake Michigan due to microscopic asbestos contamination of the water. A study of fish in Lake Michigan in 1982 found that asbestos waste disposal in Lake Michigan from the Johns-Manville site decimated the commercial whitefish industry in Waukegan as early as the 1920's.²⁸ An Illinois Department of Conservation funded study by the University of Wisconsin contained a statement of a commercial fisherman interviewed for the study in 1978 who stated "We stopped fishing pound nets when John Manville came into Waukegan..." "That was about 1920 and 1922. Up until then we were catching a lot of nice white fish in the summer, but when John Manville came in, they dumped all their excess asbestos in the lake. We'd be swimming, wading in 6-12 inches of asbestos waste. The white fish would get it in their gills."

²⁸ University of Wisconsin Institute for Environmental Studies, Marine Studies Center. "A Strategy for Re-establishing Self-sustaining Lake Trout Stocks in Illinois Waters of Lake Michigan." Report Number 42, March 1982.



Asbestos debris at Site #2 near Midwest Generation Fishing Pier Beach Area. Photo by Jeff Camplin 2003

- A 1981 U.S. EPA study of fish in Lake Superior asbestos-contaminated water indicate asbestos fibers in the flesh of the fish²⁹. No such studies have been conducted on the fish of Lake Michigan.

- **Asbestos-contaminated water continues to enter the Nature Preserve and Lake Michigan in violation of the expired NPDES discharge permit from the industrial canal of the Johns-Manville Superfund Site.**
 - The asbestos-contaminated water can currently be discharged legally into the lake at levels well above current measured levels of asbestos fibers found in Lake Michigan.
 - The U.S. Geological Survey does not identify naturally occurring serpentine asbestos mineral deposits in or around the shores of Lake Michigan. Naturally occurring asbestos contributing to asbestos background levels found in Lake Michigan would be expected to be below detection levels of the laboratory analytical methods.
 - The EPA NPDES permit for this asbestos-contaminated water discharge expired in 1996 and has yet to be reissued. If a new NPDES permit is issued the Johns-Manville Industrial Canal would have to undergo comprehensive testing for toxic

²⁹ Batterman, A. R., and P.M. Cook. 1981. "Determination of Mineral Fiber Concentration in Fish Tissue." Can. J. Fish. Aquat. Sci. 38: 952-959.

contamination. Why has there been such a long delay in issuing a new permit for a water pollution discharge into Lake Michigan adjacent to a public beach, public fishing area, and City of Waukegan drinking water intake?

- Asbestos and other potential chemical water contaminants have been found to enter the State Dedicated Nature Preserve and Federal Critical Habitat in violation of the U.S. EPA Record of Decision (ROC), Federal Consent Decree, and NPDES permit. This pollution release travels down the Dead River in the State Dedicated Nature Preserve and Federal Critical Habitat areas of the Illinois Beach State Park and eventually enters the waters of Lake Michigan. There is no documentation addressing the lack of enforcement of alternatives to constructing the required dike/berm separating the Illinois Beach State Park from the Johns-Manville industrial canal.



Photo by Paul Kakuris 2003

The Johns-Manville Industrial Canal connects directly with the State Dedicated Nature Preserve and Federal Critical Habitat. Why wasn't the Berm/Dike constructed to prevent this breach?

- The industrial canal water discharge from the Superfund Site has recently exceeded the allowable asbestos fiber discharge level stated in the expired discharge permit in May of 2002 (during opening week at the adjacent public beach) by over 14 million asbestos fibers per liter of water. No violation or subsequent enforcement action was issued by Illinois EPA or U.S. EPA, even though the City of Waukegan intake for drinking water, the Illinois Beach State Park public beach and the Waukegan public beach is in close proximity to the Johns-Manville Superfund industrial canal water discharge pipe.
- **No studies have evaluated the transfer of microscopic asbestos fibers in water as a contaminant to public beach and fishing areas. This elevated asbestos contamination of Lake Michigan water is not naturally occurring. The lake water contains microscopic asbestos contamination from several local sources including local dumping of asbestos wastes near the shoreline and continuous asbestos-contaminated water discharges from the Johns-Manville Industrial Canal NPDES effluence pipe.**

- Asbestos contamination in water is only measured at or above 10 microns in length. Carcinogenic and disease-causing asbestos fibers below 10 microns are not addressed in water. U.S. EPA water testing in Lake Michigan indicated that extremely elevated levels of asbestos fibers below 5 microns were not considered in an evaluation of public health. These smaller asbestos fibers are ignored in water measurements. **However, when the fibers in the water are transferred to the beach sand, these undetected asbestos fibers can become airborne or contaminate the beach area with little disturbance. No actions have been taken to evaluate the transfer of unmeasured smaller carcinogenic and disease-causing asbestos fibers from the water onto the beach and potentially into the air.**
- The public beach incurs ongoing recontamination by microscopic carcinogenic and disease-causing asbestos fibers as contaminated water continually washes up on the beach. Additional asbestos fibers are released when asbestos pieces tumble in the surf of Lake Michigan. The asbestos debris pieces, which are ground, abraded, worn and rounded, thereby releasing microscopic asbestos into the surf zone and the beach area in the process. **This microscopic asbestos contamination can reenter the air as water dries on the shore causing new airborne asbestos concerns on a daily basis.**



Can you identify the two pieces of asbestos near the shoreline?

Photo by Jeff Camplin 2003

- The asbestos-contaminated water can also result in microscopic asbestos-contaminated sand on the beach. **Recreation activities in the asbestos-contaminated sand can result in the transfer of asbestos contamination to park visitors, their pets, park staff, and their belongings. This provides secondary exposures to carcinogenic and disease-causing asbestos fibers when asbestos-contaminated sand travels with park patrons and staff in their vehicles to their residences offsite. No studies have been conducted on this secondary asbestos exposure to Park staff and patrons.**

- Post remediation clearance testing of the beach area by Hansen Engineering in 1998 identified the presence of microscopic asbestos in several sand samples.³⁰ The beach was reopened because the sand did not contain over 1% asbestos. Are asbestos-contaminated public areas safe to the health of the public if the microscopic asbestos contamination is no more than 1%? If so, why did the U.S. EPA recommend that trace amounts of asbestos contamination found in vermiculite home insulation are a concern to public health? Vermiculite contaminated with trace amounts of microscopic asbestos are recommended to be left alone and isolated from children³¹. **Can children safely disturb asbestos-contaminated sand on the beaches of Illinois Beach State Park? These questions have never been directly addressed by any agency.**
- Air testing for asbestos conducted by Hansen Engineering for the Illinois Department of Natural Resources, IEPA and U.S. EPA at the beach found asbestos fibers below detection levels of the analytical equipment. However, the air testing was performed in March, 1998 during damp and windy conditions. Project logs notes and photographs document the wet conditions.³² The air tests do not evaluate expected airborne asbestos exposures by the public using the beach. The air tests should be performed during hot, dry summer months with the air testing cassettes close to the ground to simulate asbestos airborne fiber exposures to park patrons lying and playing on the beach.

Microscopic asbestos contaminations from water to land transfers are not addressed by any agencies involved.

- **The risk assessment conducted for the Waukegan Park District (Berman report March 7, 2002)³³ at the proposed outdoor sports complex on the former Johns-Manville asbestos product manufacturing site does not adequately evaluate types or sources of asbestos or other toxic exposures to children anticipated to use the site.**
 - One example is a statement in the Berman report which indicates that although asbestos may be found in the adjacent State Dedicated Nature Preserve and Federal Critical Habitat, it would not be considered in the risk assessment due to the area being covered with vegetation and being almost continually wet. The assumption was made that this asbestos contamination would not contribute any significant asbestos exposure to children using the sports complex. In early May, 2003 the Nature Preserve was dry enough to burn. The charred ground revealed visible, friable asbestos waste contamination drying on the surface in close proximity to the proposed sports complex. This new possible asbestos exposure condition was never anticipated by the risk assessment.

³⁰ Hansen Engineering report to Illinois Department of Natural Resources, "Sampling for Asbestos Material Oversight of Asbestos Removal Activities – Illinois Beach State Park." Volume II, May 1998

³¹ USEPA Newsroom, "National Consumer Awareness Campaign Launched on Vermiculite Insulation Used in Some Home Attics." May 21, 2003. www.epa.gov/newsroom/headline2_052103.htm

³² Hansen Engineering report to Illinois Department of Natural Resources, "Sampling for Asbestos Material Oversight of Asbestos Removal Activities – Illinois Beach State Park." Volume II, May 1998.

³³ D. Wayne Berman, Ph.D., Aeolus Inc. "Waukegan Park District: An Evaluation of Offsite Asbestos and Air Pollutants and Their Potential Effect on Visitors to the Proposed Sports Complex in Waukegan, Illinois." March 7, 2002.

- The risk assessment also considered carcinogenic and disease-causing asbestos fibers under 10 microns to be insignificant for evaluating asbestos exposure to children using the sports complex. The airborne asbestos modeling studies heavily weighted asbestos at 10 microns and above (99.997%) while only accounting for an insignificant amount of carcinogenic and disease-causing asbestos fibers below 10 microns (0.003%). Testing indicates that carcinogenic and disease-causing asbestos structures below 10 microns are many times more abundant than the larger asbestos structures at 10 microns or greater. There was no justification in the risk assessment report for failing to consider and evaluate airborne carcinogenic and disease-causing asbestos fewer than 10 microns. Air testing performed in schools after asbestos abatement projects measures asbestos fibers down to 0.5 microns in size.
- The risk assessment calculated a child's exposure to asbestos and other toxic substances based upon a 90 pound child using the sports complex 2 hours a day for 50 days a year, for a period of 10 years. It is highly unlikely that a child using the proposed sports complex would start at and remain at 90 pounds during the 10 year exposure period used in the risk assessment. The risk assessment did not evaluate risks to larger or smaller children anticipated to use the site. The risk assessment did not consider that all children will be growing over the 10 year anticipated exposure period resulting in a range of exposures. The American Lung Association states smaller children are more susceptible to air pollution.³⁴
- The risk assessment used the EPA's recommended child's inhalation rate when determining potential exposure risks. Children using the sports complex will be very active increasing their breathing rate and potential exposure to toxic air pollutants by several fold. The Park District should consider other studies which estimate children's breathing rates at much higher volumes.³⁵ Due to the greater respiratory rates, children breathe a proportionately greater volume of air than the generic category of adults.
- Children will inhale more pollutants per pound of body weight. A child's height and play habits will more likely expose them to pollutants and aerosols that are heavier than air since their breathing zone is much closer to the ground.³⁶ The risk assessment did not evaluate these anticipated exposures.
- Adults and children with pre-existing cardiovascular, respiratory diseases, and asthma represent a special high risk group more susceptible to air pollution. The risk assessment did not evaluate this "at risk" group.
- Electric utilities are a major source of air pollutants that affect lung health, including sulfur dioxide, a powerful asthma trigger, and nitrogen oxide, which is a component of ozone smog.³⁷

³⁴ American Lung Association. "Danger Zones: Ozone Air Pollution and Our Children." March 1995.

³⁵ U.S. EPA. 2002 Child-Specific Exposure Factors Handbook. NCEA; EPA/600/P-00/002B. www.epa.gov/ncea.

³⁶ Natural Resources Defense Council. "Our Children at Risk – The 5 Worst Environmental Threats to Their Health." www.nrdc.org/health/kids/ocar/chap4.asp.

³⁷ American Lung Association. "Power Plants and Air Pollution, Health Impact of Power Plant Emissions." April 2000. www.lungusa.org/air/airout00_electric.html.



The Midwest Generation Power Plant is adjacent to the Fishing Pier Beach and the proposed Waukegan Park District Sports Complex.
Photo by Jeff Camplin 2003

- Studies have shown ozone is strongly implicated in the premature aging of the lungs. Ozone has also been shown to increase asthma attacks on hot summer days by as much as 40%.³⁸ The Midwest Generation power plant contributes ozone into the environment. **The report specifically omitted ozone in the risk assessment.**
- The risk assessment did not identify when field measurements were performed for the study. Field measurements should be taken during the summer months of June through August which represent the majority of high use activity anticipated at the proposed site.

The risk assessment was not representative of ozone, asbestos, or several other toxic exposures or the range of children and activities anticipated at the proposed sports complex.

- **Testing and investigation used to determine health risks and remediation actions by agencies involved is either insufficient and/or outdated based upon new regulatory requirements and/or ongoing studies on asbestos contamination as it relates to public health, or more stringent State of Illinois regulations.**
 - Since the initial Record of Decision (ROD) signed on June 30, 1987 there have been several new and revised asbestos regulations and waste disposal and landfill

³⁸ Weitzman, M., "Recent Trends in the Prevalence and Severity of Childhood Asthma." JAMA, vol. 268, no. 19, November 18, 1992, pp. 2673-2677.

requirements on the federal, state and local levels. These include the enactment of the federal Asbestos Hazard Emergency Response Act (AHERA), revisions to the Clean Air Act's National Emission Standard for Hazardous Air Pollutants (NESHAP), Occupational Safety and Health Administration (OSHA) revisions to their general industry and construction asbestos standards, two revisions to the Illinois Asbestos in Schools Rule, the creation of the Illinois asbestos Commercial and Public Buildings Act, and the creation of the Illinois Asbestos Abatement Act.

- Recent asbestos contamination issues have resulted in new evaluation and testing approaches which exceed asbestos regulatory requirements in the interest of public safety. New approaches have been developed and used in California where naturally occurring asbestos was used to construct roadways and parking lots. Additional testing methods and medical investigations have been developed and initiated in Libby, Montana where vermiculite mining operations resulted in asbestos contamination to miners, their families, the surrounding community (now a Superfund Site), and secondary asbestos contamination through distribution of asbestos-contaminated vermiculite products to the general public. The U.S. EPA has issued safety recommendations and precautions to homeowners regarding the contaminated vermiculite insulation found in their homes. The collapse of the World Trade Center has resulted in new and revised approaches by the U.S. EPA to analyzing and responding to asbestos contamination and the related health effects to the public. These sites have initially utilized some analytical techniques similarly performed at the Illinois Beach State Park beaches, State Dedicated Nature Preserve and Federal Critical Habitat, and Johns-Manville Superfund Site #2 (including the warm water channel fishing area/beach) and Waukegan sites. Some of the World Trade Center asbestos contamination testing has subsequently been found to be insufficient or require modification over the past 18 months due to public safety concerns³⁹. New approaches need to be taken at the Illinois Beach State Park and Johns-Manville Superfund Site due to the unique characteristics of the site.
- The Mine Safety and Health Administration (MSHA) and the National Institute of Occupational Safety and Health (NIOSH) are currently concerned with and investigating secondary asbestos exposures from workers bringing asbestos contamination home with them. This should be a concern at the Waukegan site involving beach patrons, their pets and park staff bringing carcinogenic and disease-causing asbestos contamination home with them from asbestos contamination and exposures from the asbestos-contaminated park grounds and lake water.
- No studies have been conducted on the microscopic asbestos-contaminated water continually causing asbestos recontamination to the public beach areas. Asbestos-contaminated water washes up and dries on the beach on a daily basis. These constantly changing asbestos contamination levels from water to the beach are not addressed or monitored by any state or federal agency.

³⁹ New York City Department of Health and Mental Hygiene, et al., "Final Report of the Public Health Investigation to Assess Potential Exposures to Airborne and Settled Surface Dust in Residential Areas of Lower Manhattan." September 2002. Available at www.epa.gov/wtc/factsheets/index.html.

- Testing of the sand on the public beaches applies a greater than 1% threshold for initiating any response actions. This allows for significant dilution of contamination by continually adding new sand to the beach so that remediation is not necessary. This 1% level has no correlation to asbestos contamination of non-asbestos containing sand and its relationship to public safety.
- **The analytical method utilized to determine the 1% threshold for asbestos in beach sand was invented for the Hansen study and did not follow USEPA Superfund protocol. Additionally, the sampling methodology for obtaining sand samples allowed for the dilution of microscopic surface asbestos contamination by coring down 6” into the beach. Subsequent testing following EPA Superfund protocol in 2002 found microscopic asbestos contamination in areas the Hansen report stated were “non-detected” for asbestos.**
- The Berman study conducted for the Waukegan Park District found the sand samples that were indicated to be “non-detectable” for asbestos in the Hansen IDNR studies “exhibit among the highest concentrations (of asbestos) when measured by the modified elutriator method” (which was the analytical method used by Berman). This statement indicates that sampling to identify asbestos contamination is highly dependent upon the analytical method selected. **The state and federal agencies continue to use analytical methods that fail to detect the carcinogenic and disease-causing asbestos fibers in sand, air and water.**
- The EPA has continually stated that there is no lower safe level of asbestos exposure. *Example: If there are 100 tons of sand on the beach, there could be 1 ton of asbestos fibers contaminating the sand and testing would find the beach to be 1% or less asbestos requiring no actions. Obviously, there is much more than 100 tons of sand on the 6.5 miles of beach in the park. How many tons of asbestos contamination are acceptable on the beach if the EPA states there is no safe level of asbestos exposure?*
- **The U.S. EPA had evaluated and concluded that it will not use more stringent State of Illinois regulations for remediation of asbestos-contaminated landfills found on the site. The EPA stated that the “desire to apply more stringent regulations is not, in and of itself, a legitimate reason for pursuing a [Record of Decision] amendment” (EPA/ESD/R05-00/521 page 5). The EPA has recently stated that the remedy for the site remains protective of human health and the environment based upon the less stringent federal regulations.**
- **Dredging activities just off shore of the Waukegan Harbor approach channel and from the Midwest Generation fishing pier and public beach disturb asbestos waste on the bottom of Lake Michigan causing asbestos contamination to public areas.**
 - Dredging operations disturb regulated asbestos waste that was previously dumped into Lake Michigan causing asbestos-contaminated plumes to re-contaminate lake water.
 - The dredged material has had visible and microscopic asbestos contamination identified in it. In previous years, this material was dumped on the Illinois Beach State Park public beach as a replenishment material.

- A large pile of asbestos-contaminated dredged material has been located at the north end of the park for over 5 years while state and federal agencies determine what to do with it. An Illinois EPA memo from former Director Mary Gade indicates the dredged material should be handled as a regulated waste since it was disturbed from an original disposal site at the bottom of Lake Michigan. Once it is disturbed, it was the Illinois EPA's opinion that it is a regulated waste and recommends not disturbing this material in the future. The IEPA continues to issue dredging permits to the Corps of Engineers allowing the asbestos-contaminated lake bottom to be disturbed contrary to former IEPA Director Mary Gade's ruling on pollution control regulations. These asbestos-contaminated piles were previously dumped on the Illinois Beach State Park shoreline as beach replenishment and are currently either dumped farther out in Lake Michigan or are allowed to dry onshore and were taken offsite for use in the construction industry. **The asbestos-contaminated material has been officially classified by the Illinois EPA in 1998 as an industrial process waste or pollution control waste, but has not been handled as such once it was dredged and placed on land.**

Recommendations

Based upon the above concerns, I am making the following recommendations:

- Restrict access to all public sites that have documented asbestos contamination.
 - The Illinois Beach State Park beaches and all Illinois Department of Natural Resources public areas including the Johns-Manville Superfund Site #2 (which includes the public fishing area) should be closed to the public until an evaluation can be made of the health risks associated with the continuous visual and microscopic asbestos contamination.
 - Employees should be restricted from contaminated areas unless they have proper training and protective equipment.
 - Public areas contaminated with microscopic asbestos fibers should have U.S. EPA recommendations for the public similar to the asbestos-contaminated vermiculite home insulation. It should be recommended that the asbestos-contaminated beach materials not be disturbed and that children should not play in these asbestos-contaminated beach areas. Procedures for decontaminating beach patrons, their pets and their belongings should be established and enforced at the Illinois Beach State Park, the Johns-Manville Superfund Site #2 (which includes the Midwest Generation Pier public fishing area) to minimize potential secondary asbestos exposures caused by microscopic asbestos contamination from the beach to their personal belongings.
- Define the full scope of subsurface asbestos contamination on the land and offshore and integrate the findings into the overall site remediation plan.
 - The previous testing and investigations by all agencies have obviously missed significant quantities of asbestos as it is currently visible in the warm water channel, Lake Michigan water, Johns-Manville Superfund Site #2 (including the fishing pier area and in recent asbestos remediation areas), in the State Dedicated

Nature Preserve and Federal Critical Habitat, and on the Illinois Beach State Park beaches.

- Evaluate sources of microscopic asbestos contamination contributing to increased levels in the lake and what the effect is to public health as the contamination is transferred to the shore and beaches.
 - **Drinking water standards should not be used for waste water discharge.**
Asbestos-contaminated water from asbestos abatement projects in public and private schools is required to be filtered below 5 microns before entering the sewers for treatment. Minimally, the asbestos-contaminated waste water from the Johns-Manville Industrial Canal should not be allowed to discharge carcinogenic and disease-causing asbestos fibers above 5 microns into Lake Michigan.
 - Consider the water of Lake Michigan to be a significant contributor of asbestos contamination to the shoreline with visible and microscopic asbestos.
 - Evaluate how dredging activities disturb asbestos contamination on the bottom of the lake contaminating the lake water and potentially the shoreline.
 - Eliminate discharges from the Johns-Manville industrial canal that has recently released microscopic asbestos fibers into Lake Michigan well above previously measured Lake Michigan levels and NPDES permit requirements. Minimally, no detectable asbestos fibers above 5 microns should be allowed into Lake Michigan near swimming areas and the Waukegan public drinking water intake.
 - Water tests do not consider carcinogenic and disease-causing asbestos fibers under 10 microns. These smaller asbestos fibers sizes are potentially hazardous and carcinogenic and disease-causing to beach patrons when they wash ashore and have the potential to become airborne. Again, no detectable asbestos fibers above 5 microns should be allowed into Lake Michigan near swimming areas and the public drinking water intake.
 - Conduct airborne evaluations of asbestos fibers during dry summer months at various levels off the ground to simulate more accurate exposures to the public. Previous air tests conducted by Hansen Engineering were performed on damp, windy days in March which did not represent typical summer conditions.
 - Evaluate the potential health effects of microscopic asbestos fibers traveling home with beach patrons and their pets frequenting the asbestos-contaminated beaches causing potential secondary exposures at home. Park staff should also be included in this study.
 - Study the amount of asbestos fibers in fish flesh inhabiting the waters near the Johns-Manville industrial canal water discharge where asbestos fiber contamination has exceeded 21,000,000 fibers per liter of water. Determine if the fish are safe for children and adults to eat? Also test fish that may have entered the Johns-Manville Industrial Canal through the effluence pipe.
- Re-evaluate the Waukegan Park District risk assessment report for the proposed sports complex.
 - Determine what toxic and hazardous materials require evaluation more comprehensive evaluation.
 - Determine the at risk population that will frequent the site and include this population in the risk assessment.

- Evaluate “worst-case” exposures for the public to evaluate. Average exposures of a limited study group do not present an accurate reflection of exposures to the population expected to use the site.
- Use a full range of age groups, at risk populations, and expected activities for the risk assessment. Let the public determine what an acceptable risk is to their children based on all known data.

Conclusion

The asbestos contamination found at Illinois Beach State Park beaches, State Dedicated Nature Preserve and Federal Critical Habitat, Midwest Generation Pier warm water channel public fishing and beach area, former Johns-Manville manufacturing site, the Johns-Manville Waukegan Superfund Sites, and Lake Michigan pose a potential health risk to anyone visiting these sites. Despite the tens of millions of dollars of private and taxpayer money spent in studies, testing and remediation, the sites continue to show visible and microscopic asbestos contamination. Much of the asbestos originated from the Johns-Manville asbestos manufacturing plant over its 60 plus years of operation. Some of the asbestos containing waste tailings were used by the U.S. Army to construct a berm for a shooting range used at the 1959 Pan Am games. This asbestos berm was bulldozed and spread contamination throughout the area. The extent of the asbestos contamination continues to grow in these areas.

It is obvious to anyone reviewing the site documentation that a fragmented approach has failed to solve the asbestos contamination concerns at these sites. New studies conducted by the U.S. EPA at Libby, Montana and the World Trade Center sites have developed new strategies for addressing asbestos contamination where the public has exposure. The sites discussed in this report are more unique than either the asbestos-contaminated Libby site or World Trade Center site. **A fresh approach to the multifaceted asbestos contamination issue is necessary to address the existing complex conditions and future community uses of this highly accessible and popular public area.**

Pictures taken by Jeffery C. Camplin during May 2003 at Illinois Beach State Park



Some asbestos contamination is easier to see than in other instances. Would you swim or fish here?



APPENDIX 1

Footnote Citation Documents

The following section contains some of the documents cited in the footnotes throughout the report. Those that are not included in this section can generally be obtained through the website address listed in the specific footnote. Most documents are in their entirety. However, some of the references used are from reports that are several hundred pages in length. Only the front cover and specific pages referenced are included for these larger documents. The reader should contact the appropriate party listed on the cover for the complete document.

About the Author:

Jeffery C. Camplin CSP, CPEA is President of Camplin Environmental Services, Inc., a safety and environmental consulting firm located in Rosemont, Illinois. In his role, he provides asbestos consulting services including teaching USEPA accredited asbestos courses at several training centers in the Chicago area since 1988. Camplin has a degree in Safety from Northern Illinois University and has been an Illinois licensed asbestos professional since 1986. He is a professional member of ASSE and is currently serving a second term as the Assistant Administrator of the Society's Environmental Practice Specialty. Mr. Camplin has just been selected out of ASSE's 30,000 members to receive their Presidents Award for outstanding service (June 2003).

His article entitled "It's Back – Asbestos gets a second wind" will be published in the American Society of Safety Engineers peer reviewed Professional Safety Journal in August, 2003. Jeff has previously written several asbestos and safety articles which have been published in Compliance Magazine, Maintenance Solutions Magazine, Facility Care Magazine, and the Enviromentor Newsletter. His first asbestos article was published in 1987 by the Joint Commission on Accreditation of Healthcare Organizations which was titled "Managing Asbestos in Healthcare Facilities."

Attachment D – 2005 NewSun Article on Asbestos-Containing Materials
found on Waukegan Beach

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Asbestos found on Waukegan beach

Dunesland: Says state, feds need to warn people

By [Frank Abderholden](#)
STAFF WRITER

WAUKEGAN — A researcher with the Illinois Dunesland Preservation Society has found a number of pieces of material suspected to contain asbestos on the city's lakefront.

Asbestos on the beach has been controversial at the Illinois Beach State Park north of Waukegan where pieces of asbestos-containing material (ACM) continue to wash up on the beach.

The Illinois Dunesland Preservation Society has criticized state and federal officials saying they aren't doing enough to warn people.

Recently, a two-year state study released by Illinois Attorney General Lisa Madigan's office that was done by the University of Illinois-Chicago School of Public Health found there was no significant public health threat due to asbestos exposure on the beaches in Zion.

"This is the fourth study since 1998 that says the beach is safe," said Melissa Merz, a Madigan spokeswoman. "The study was not done by politicians or elected officials. That's coming from doctors."

A health and safety professional with a speciality in asbestos, Jeffery Camplin, found about 20 pieces of material that looked like ACM on June 22 along the beach north of the Waukegan Municipal Beach that is between the north breakwater pier and Government Pier where lifeguards are on duty.

One piece that was tested showed it contained between 30 and 35 percent asbestos, said Camplin.

"One piece was the size of a shoe box," he said. "The pieces are larger than what we are finding at Illinois Beach State Park."

Dunesland said the pieces look like fractured brake shoes, gaskets and other manufactured asbestos products.

Dunesland notified Waukegan Mayor Richard Hyde and all city aldermen of what was found. City Engineer John Moore said city crews combed that area of the lakefront near the old Outboard Marine Corp. office buildings on Sea Horse Drive in the spring and found nothing.

The city was taking soil borings to determine the PCB levels for the clean-up of the property the city has purchased. As part of the project, they had the lakefront checked from the Municipal Beach to the North Shore Sanitary District plant and no ACM was found.

Dunesland also brought up the possibility of microscopic asbestos contamination of the sand on the beaches because that area was not tested during the latest study by the University of Illinois-Chicago.



Ben Smidt / STAFF PHOTOGRAPHER
Environmental researcher Jeffery Camplin holds up a large piece of asbestos found washed up on the Waukegan Municipal Beach. It was one of several he collected during a walk on the shoreline.

"We may do some microscopic testing for that. I think we have enough left from the grant," said Moore, explaining the grant, from the county, was for PCB testing and beach combing for ACM material.

"We'll do a little more testing and a little more combing," he said, adding the city did find some PCB contamination in what is known as the North Ditch.

If ACM is discovered then there may be a need to have a regular pick-up process like the one at Illinois Beach State Park.

The latest study by the University of Illinois-Chicago, however, did make four recommendations for Illinois Beach State Park.

It suggested a continuation and expansion of beach surveillance to look for ACM and pick it up, along with detailed record keeping of where it was found.

The study said the state park should also review its education efforts about ACM to determine its effectiveness so people don't pick up the material. Dunesland has pushed for fliers to be distributed, but officials at the Illinois Department of Natural Resources, which run the park, have opted for a small amount of signage at this point.

The study called for a survey of erosion areas for remains of housing infrastructure. Some of the pieces found on the beach are from old buildings and the study suggested looking for that infrastructure and remove it according to regulations.

The final recommendation was for the IDNR to explore other options for long-term beach nourishment and erosion management.

A lot of the ACM is in the form of broken pieces of transite pipe, which is a mixture of asbestos and concrete. The pipe was made at the old Johns Manville plant that is now part of a hazardous waste Superfund site.

Various studies have identified old buildings and a berm that was made out of waste pipe and other material for the 1959 Pan Am games shooting event that was bulldozed into the lake afterwards as the source of the pieces of ACM washing up on the shoreline.

The IDNR up until a few years ago regularly dredged the channel near Midwest Generation (formerly the ComEd coal-fired plant) and placed that sand at the north end of the park as beach nourishment because of the erosion caused by North Point Marina.

Pieces of ACM have been found in the sand and Dunesland concludes that a lot of the ACM showing up on the shoreline could be from that beach nourishment sand.

7/7/05

Attachment E – Page 24 from the Illinois Attorney General’s UIC report that discusses how the analytical methods used by the USACE to test for asbestos in Waukegan Harbor are not sensitive enough to detect asbestos.

II. Sand Sampling

In early 1998, 173 sand samples were systematically collected at IBSP and analyzed by PLM methods for bulk samples. 165 of these samples were below the limit of detection for asbestos, and eight samples were less than 1% asbestos. Twenty-four sand samples were analyzed by TEM. Nine of these samples were below the limit of detection, thirteen of the samples were less than 1% asbestos, one had a trace amount of asbestos, and one was a core sample that identified ACM in a roadbed adjacent to Johns-Manville property.

Environmental Assessment of Asbestos in Sand

I. Rationale

One of the questions of interest regarding ACM contamination at IBSP was whether or not ACM was deteriorating from natural forces and contaminating beach sand with asbestos structures in areas where no ACM was visibly present. GLCEEH reviewed the analytical techniques and results of air sampling and other testing previously performed on beach sand and nourishment sand sources as referenced above. Although the bulk methods that were used are standard methods for characterizing ACM, the sample preparation and analytical techniques of these methods do not have sufficient analytical sensitivity for quantitative characterization of sand and soil. In order to perform the comparisons required to meet the goals of this study, it was necessary to define concentration distributions and to statistically compare potential beach nourishment sources with background levels and current levels of asbestos on the IBSP beaches.

II. Sampling Design

Sampling for asbestos structures was conducted in two lake-bottom sources of sand for beach nutrition, three comparison background locations, and the two IBSP (North and South) Units for a total of seven distinct areas. In order to perform a statistical comparison of potentially contaminated vs. non-contaminated sources, quantification of concentration and sufficient independent sample collection was needed to provide an assessment of variability of distribution. In order to obtain sufficient quantification of concentration, GLCEEH developed a study design that included collection of twelve independent samples in each of the seven areas.

Twelve samples were collected per area in order to provide relatively robust sampling for statistical comparison purposes. Power calculations suggest that 12 samples is a reasonable number to use to estimate the average concentration of asbestos at a defined location. GLCEEH estimated that 12 samples would be sufficient to define the mean concentration for each site with a 95% confidence and 30% maximum relative error and to provide a basis of comparison to potential sources of sand for beach nourishment.⁸⁹

III. Analytical Methods

In order to allow comparison between areas and samples, a sensitive method was needed to detect low concentrations of asbestos. GLCEEH utilized the sampling numbers, protocols, and methods as described below. The method that was chosen differs from traditional methods for analyzing soil and sand, primarily because of the way the samples are prepared. The preparation

⁸⁹ Gilbert, Richard O., Statistical Methods for Environmental Pollution Monitoring, Van Nostrand Reinhold, NY, NY, 1987, p 33.

Attachment F – UIC School of Public Health Website from 2017
deceptively stating the Illinois Attorney General’s Asbestos Task Force
report was still under a non-existent peer review.



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Illinois Beach State Park:

Determination of Asbestos Contamination in Lake-Bottom Sand Used for Beach Nourishment; Interim Report of Findings

GLCEEH performed a Health Hazard Evaluation (HHE) as part of its role in the Illinois Attorney General's (AG) Asbestos Task Force formed to address asbestos contamination at Illinois Beach State Park (IBSP). The objective of the report was to answer the question of whether or not potential sources of nourishment sand, IBSP beaches, and background areas had statistically significant differences in levels of asbestos structures in sand and whether these differences represented human health hazards. GLCEEH designed a study using extremely sensitive sampling methods to answer this question. **The report generated from the study is currently under peer review.**



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Environmental Source of a Fungal Pathogen at an Outpatient Health Care Clinic

GLCEEH was asked by IDPH to provide technical assistance with sampling for a fungal pathogen that infected several patients at an outpatient health care clinic. Some or all of the cases may have been immunocompromised. The investigation was led by IDPH and CDC. Numerous samples from surfaces and fluids were collected, cultured, and analyzed. Two environmental samples that were collected in the ventilation system cultured organisms that matched the organisms found in several of the cases. The route of exposure was probably not via the respiratory system and may have been related to patient treatment practices. GLCEEH and IDPH made recommendations for decontamination and improvement of the ventilation systems.

Environmental Source of a Fungal Pathogen at a State Facility

GLCEEH received a request from IDPH to review and perform data analysis of bioaerosol sampling results reported by two consultants. The reports had been generated before and after remediation of several moisture intrusion sources. GLCEEH review indicated that the sampling and analytical techniques utilized for the two reports were too dissimilar to compare using data analysis. A site visit and a review of ventilation practices and previously collected ventilation information were performed. Previous moisture intrusion was a likely source of bioaerosols, but air sampling results did not indicate elevated interior concentrations of any particular organism or group of organisms after remediation. Several locations within the structure continued to have moisture intrusion. GLCEEH determined that there were deficiencies in the operation of the HVAC system that caused negative air pressurization of the structure, which in turn exacerbated moisture intrusion.

Indoor Air Quality (IAQ) at a High School

An IAQ investigation of a suburban high school was requested by IDPH because of numerous IAQ complaints during building renovation and construction of an addition to the school. The local school board had hired consultants to investigate the structure. The consultants made a number of recommendations to correct and remediate moisture intrusion. However, IAQ complaints persisted. GLCEEH reviewed environmental consultant reports, occupant questionnaires, and some medical records that were voluntarily supplied by staff, and made several site visits. Specific complaint areas were evaluated for ventilation parameters, and deficiencies were found. The probable sources of complaints in the areas that were evaluated included insufficient ventilation and deficient configuration of the heating, ventilation, and air conditioning (HVAC) system. A potential source of bioaerosols was also found. A comprehensive report was provided to the school board and staff labor union.

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