



August 1, 2019

Mr. Michael C. Padilla, PMP
U.S. Army Corps of Engineers, Chicago District
231 S. LaSalle Street, Suite 1500
Chicago, IL 60604-1437

Re: Friends of the Parks Comments on the Draft Chicago Area Waterway Systems (CAWS) Dredged Material Management Plan (DMMP) and Integrated Environmental Impact Statement (EIS), April 2019

Dear Mr. Padilla:

Friends of the Parks (“FOTP”) appreciates this opportunity to submit these comments on the U.S. Army Corp of Engineers’ (“ACOE”) April 2019 Draft Dredged Material Management Plan and Integrated Environmental Impact Statement (“DMMP/EIS”) for the Chicago Area Waterway System in the Calumet region.

As a city-wide parks advocacy organization, Friends of the Parks’ mission is to inspire, equip, and mobilize a diverse Chicago to ensure an equitable park system for a healthy Chicago. We are disappointed that the ACOE’s Tentatively Selected Plan (“TSP”) relies upon constructing and operating a Vertical Expansion of the current Confined Disposal Facility (CDF) on a Chicago Park District (“CPD”) site and the Public Trust shore. We oppose this plan for a number of General Reasons, as well as a number of Specific Flaws and Deficiencies we find in the ACOE’s DMMP/EIS analysis, which we outline below.

Furthermore, we join with local residents and other environmental advocates in opposing the siting of a CDF in the 10th Ward of the City which is already environmentally overburdened. Indeed, we find that in selecting the “TSP” the ACOE will further degrade air quality in the 10th Ward in close proximity to residences as well as parks, beaches and other recreational and cultural resources. This proposal will result in the release of airborne sediment and volatilized PCBs into the local environment, as well as adversely impact and endanger Lake Michigan water quality for both recreational users and the entire Chicago region that relies on drinking water provided by Lake Michigan. We urge the ACOE to pursue other options, including treatment in lieu of disposal and sediment reduction. If the ACOE nonetheless decides to pursue the Vertical Expansion option despite the many problems with this site and this proposal, we believe it must

go back and provide a revised Draft DMMP/EIS for public review and comments which responds to the many flaws and deficiencies noted herein prior to proceeding to a Final DMMP/EIS.

I. GENERAL COMMENTS

A. THE TENTATIVELY SELECTED PLAN REQUIRES BROADER PUBLIC REVIEW BY LOCAL AND REGIONAL GOVERNMENTS

Lake Michigan and its shore comprise the premier natural resource in the City of Chicago and this Region. Since 2009, Friends of the Parks has advocated for uninterrupted public access to the lakefront and completion of the lakefront park system through the Last Four Miles initiative. Through the Last Four Miles Initiative we are working to ensure continuous, public access along the last four miles of Chicago's 30-mile lakefront, including two miles on the southeast portion of the city's lakefront which includes the CDF site. Launched in 2009 in conjunction with Chicago's 100-year celebration of the Burnham Plan, the "Last Four Miles" vision lays important groundwork for next steps in comprehensive, community-inclusive planning.

These long-standing city-wide plans would be waylaid, if not terminated, should the Corps decide to effectively create a permanent landfill within the last two miles on the Lake Michigan shore. The existing CDF should never have been allowed to be placed in the waters of Lake Michigan. Its creation took public lakebed for private purposes and was only allowed on the condition that this property be returned to the public for park land in what was thought to be just 10 years. Should this tentatively selected plan move forward, another entire generation of people would be denied access to this lakefront and the green space owed to them.

Such a decision should not be taken outside a broad, comprehensive neighborhood, City and regional planning process focused on the development and preservation of this portion of the Lake Michigan lakefront in the interest of the people – not just the interest of the handful of corporations that benefit from a publicly subsidized dredge disposal facility. In addition, to the adverse impacts the vertical expansion will have on an already heavily burdened community, the Vertical Expansion proposal will have a negative effect on proposals for redevelopment of the USX property immediately adjacent to the proposed site. The City has been trying for more than a decade to partner with private developers to redevelop the former U.S. Steel South Works site, the largest piece of undeveloped lakeshore property in the city. Recently the USX site has been raised as a potential site for two new developments, including a potential Chicago casino as well as a site for a hotel, housing, film studio, and concert venue. If the current CDF is expanded it could detract potential developers from the USX property, thus negatively impacting the South Chicago community and the entire Southside. These potential impacts must be considered in a far broader planning process than is provided by the ACOE in this proceeding.

Further, the process provided by the ACOE has been rushed and insufficient. Friends of the Parks has serious concerns over the transparency and thoroughness of the process employed by ACOE in arriving at the tentatively selected plan. ACOE discusses beginning a process to look for a new site in 2010 – but an expansion of the existing CDF on park property was ruled

out early on. In 2015, after ACOE had arrived at a different tentatively selected plan, the identified Non-Federal Sponsor fell through and ACOE began to look at alternative locations that still did not include expansion of the existing CDF. In 2018 the ACOE took comments on alternate sites identified in 2015, but an expansion of the existing CDF was not included in those alternates.

Vertical Expansion of the existing facility was only publicly raised as possible option among others in the December 28, 2018 Federal Register announcing that the ACOE would undertake an Environmental Impact Study. The Vertical Expansion was not revealed to be the ACOE's tentatively selected plan until the draft DMMP/EIS was released for public comment in April 2019. Two public hearings were rushed through before interested parties had had an opportunity to review the lengthy DMMP/EIS. As FOTP began its review, it realized that ACOE had provided no environmental data supporting its conclusion that the existing CDF had operated safely. FOTP quickly filed a Freedom of Information Act ("FOIA") Request ACOE and request for extension of time to comment on the DMMP/EIS. Almost a month later ACOE provided thousands of pages of data and reports that had not been included with the DMMP/EIS or otherwise publicly posted information. Subsequently, much of this information was posted on the ACOE webpage. The comment period was extended by 45 days; however no additional hearings have been held. After 9 years of reviewing other sites and other issues, this rushed process has not allowed interested parties, including community groups, parks, open space and environmental advocates, public officials, and the new City of Chicago administration, to fully review and evaluate the significant issues posed by the ACOE's new Vertical Expansion proposal.

B. ACOE'S "LEAST COST" ANALYSIS RELIES ON FOISTING COSTS AND LIABILITIES ON SOUTHSIDE NEIGHBORHOODS, THE CHICAGO PARK DISTRICT, AND CHICAGO TAXPAYERS

No quantification of the "cost" of permanently occupying this former Lake Michigan lakebed is included in the ACOE's analysis. Indeed, one of the reasons the ACOE finds the Vertical Expansion of the existing CDF to be the "least cost" option is because it considers taking this public land to be "free." The DMMP/EIS cost analysis also fails to quantify and include the post-closure costs and liabilities this decision will impose on the City of Chicago, its Park District and its taxpayers. The ACOE's "least cost" analysis is seriously flawed for failure quantify and include these costs.

In addition to the costs for Operation, Maintenance, Repair, Replacement, and Rehabilitation ("OMRR&R") being newly foisted on the Chicago Park District¹, Chicago taxpayers will also be left with the long-term liability for this site that the ACOE itself seeks to avoid. The risks and liability that already exist for the 1984 CDF structure are increased by ACOE's proposed decision to place up to another 1 million tons of dredge industrial waste on top of the existing CDF. This new facility will sit on top of a "floating" foundation which itself

¹ The DMMP/EIS states that the Chicago Park District will be responsible for post-closure OMRR&R for the TSP. This is new. Under the 1982 Access Agreement, the post-closure OMRR &R responsibility and costs were to be borne by the International Port District, not the Chicago Park District.)

holds a million tons of concentrated, wet, highly contaminated dredged material. Moreover, the City and CPD will be left with liability for this precarious structure in the face of unprecedented Lake levels, increasing storm surge, and the well-documented risk of destruction of lakefront structures all along the Lake Michigan shore.² Further, ACOE is proposing to build this without applying the safeguards of a double liner and leachate collection system that would be required for any other industrial waste landfill.

Have the City of Chicago and Chicago Park District actually agreed to take on these costs and liabilities? The DMMP/EIS states that the CPD has agreed to the TSP, but no evidence of the agreement is provided in the DMMP/EIS and, in response to a Friends of the Parks' Freedom of Information Act request, the CPD provided no evidence of any written correspondence or agreement between the ACOE and the CPD on the TSP or extending the 1982 Access Agreement beyond its current terms. Indeed, the new Mayor and her Administration, the Chicago City Council, the Park District Superintendent, or the Park District Board would all certainly need to review any such proposal before agreeing to take on these costs and liabilities. Rather than the useful park land the City bargained for in 1982, the City of Chicago and Chicago Park District will be left with the bill for managing in perpetuity a towering hazardous waste landfill. The ACOE is proposing to saddle City taxpayers with an albatross that they will be paying for generations to come while never regaining the public trust land intended for park land. Are the City of Chicago, CPD and taxpayers aware of the cost and liabilities they are expected to assume as a result of this ACOE decision?

C. ENVIRONMENTAL JUSTICE IMPACTS

As the ACOE is aware, environmental activists, local residents, and others have serious concerns over their environmentally overburdened community which has for too long borne the brunt of industrial contamination and would continue to do so under this proposal. We fully support local advocates' concerns about having another CDF to store dredged material in the over-burdened 10th Ward. Indeed, the existing CDF is in the 10th Ward and is a part of that existing burden. Prolonging the life of that facility, doubling the volume of dredge it will contain, and increasing its dredge processing activities at this location will only further burden this community. This location is not only our region's water supply, it is the 10th Ward's lakefront and social and recreational resource. As will be discussed further below, Calumet Park Beach is directly downstream from this site. Calumet Park where low-income children and families meet and play sits directly south of the existing CDF and proposed Vertical Expansion site. The DMMP/EIS fails to specifically identify the adverse impacts which would be borne by these children and families.

The DMMP/EIS acknowledges that the entire study area and all of the alternative sites reviewed by the ACOE fall within low-income, minority communities covered under of the Executive Order on Environmental Justice. However, the Environmental Justice Appendix K entirely fails to address the community in which ACOE's Vertical Expansion TSP is actually

² See attached link to a Chicago Magazine July 22, 2019 article on the recent destruction of ACOE constructed concrete barriers at Juneway Beach on Chicago's northside.

located —South Chicago. Indeed, the existing CDF lies on the eastern edge of South Chicago, yet South Chicago is left completely out of the environmental justice analysis. The southern portion of South Chicago also lies along the Calumet River and thus is within the study area. As a point of reference, South Chicago is the least affluent of all communities along the southeast side. South Chicago has a total population of 28,095 people (the most populated of all community areas in the region) which is 74% African American and 22% Latino with a median household income of \$28,504. Continuing to place the CDF in that region will disproportionately impact the poorest, most densely populated community area in the region.

ACOE's failure to understand that its proposed TSP is located in South Chicago suggests that the entire EJ analysis provided with this DMMP/EIS has not been taken seriously, but may have simply been "recycled" from ACOE's prior reports, focused on a different TSP site. This is unacceptable and a serious flaw in the DMMP/EIS. Moreover, Environmental Justice isn't just a "hoop" for ACOE to jump through before doing whatever it proposed to do prior to analyzing Environmental Justice impacts. As the ACOE states, "Executive Order 12898 of 1994 directs federal agencies to identify and *address any disproportionately high adverse human health or environmental effects of federal actions to minority and/or low-income populations*, which the DoD implemented through the Department of Defense's Strategy on Environmental Justice of 1995." DMMP/EIS, Appendix K. [*emphasis added*]

ACOE states: "It is imperative that the DMMP adequately documents that vulnerable populations do not bear the brunt of any significant adverse impacts associated with implementation of the TSP. This is accomplished through documentation of vulnerable populations in the study area, potential adverse impacts to the human and natural environment, and why these communities would not be disproportionately burdened by the proposed action." (DMMP/EIS p. 138) We respectfully disagree with this formulation of the ACOE's duty under Executive Order 12898. "Addressing" Environmental Justice disproportionate impacts does not mean simply identifying vulnerable populations and explaining a predetermined decision to them. It also doesn't mean making general statements about how the proposed activity will be strictly controlled. It means ensuring that ACOE decisions avoid creating additional adverse impacts on those populations. In this case, that means not building a new dredge facility at a location that will increase air pollution in those communities or that will release toxic contaminants into the Lake Michigan waters bordering the parks and beaches that serve those communities. Because the DMMP/EIS ignores and denies any environmental impacts will occur, it never factored these impacts into its Environmental Justice analysis or its selection of the South Chicago location for its TSP.

In its July 22, 2019 comments on the DMMP/EIS, U.S. Environmental Protection Agency found that ACOE has not adequately considered the effect the Vertical Expansion option will have on Environmental Justice communities:

"Environmental Consequences (Section 4.0) portion of the DEIS did not include any information or discussion on how the new vertical expansion of

the existing CDF will affect the overall air quality in adjacent communities with identified environmental justice concerns. Section 4.9 of the DEIS states, "*Construction of the facility may have minimal short-term impacts to residents but these impacts would be the same regardless of race or income.*" EPA does not agree with this statement, particularly because it is not relevant here; air quality effects will be predominantly borne by minority populations and/or low-income populations that surround the project location.

"Specifically, disproportionately high and adverse impacts are typically determined based on the impacts in one or more resource topics analyzed in NEPA documents. Any identified impact to human health or the environment (e.g., air quality impacts, noise impacts, traffic/congestion increases, modification of land use) that potentially affects minority populations and low-income populations in the affected environment might result in disproportionately high and adverse impacts." (USEPA, July 22, 2019 Comments)

Friends of the Parks agrees that vertically expanding the CDF in its current location would disproportionately impact poor minority residents the most. ACOE's failure to substantively address the air quality impacts of its TSP on low income, minority communities violate the intent of Executive Order 12898.

The Army Corps has stated that it is compelled by statute to pursue the "least cost alternative." We believe that a community that has been as environmentally overburdened as the southeast side of Chicago deserves the *best* alternative and we call on the ACOE, local elected officials, and the non-federal sponsor to pursue other options including treatment in lieu of disposal rather than vertical Expansion of the existing facility. **A concern for environmental justice demands that we expect more.** FOTP agrees with the U.S. EPA's comment that the ACOE must go back and seriously review the air pollution and water pollution impacts of its selection of the Vertical Expansion on the South Chicago neighborhood and the other surrounding Environmental Justice communities. This review must include input from these communities. Given the large Latino population in these communities, it must also include a Spanish translation of notices and ACOE documents and the provision of a Spanish translator at public hearings.

D. THE TSP VIOLATES THE PUBLIC TRUST DOCTRINE

The DMMP/EIS reneges on the ACOE's 1982 promise to the people of the State of Illinois and Chicago's Southside communities to return this public trust land to the public. Under the Public Trust Doctrine, the ACOE cannot create a *de facto* permanent waste disposal site on Chicago's lakefront.

The Public Trust Doctrine was established over 100 years ago in the landmark case *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387 (1892) which focused on the construction of a railroad on the very Chicago Lake Michigan shore at issue here. The United States Supreme Court in *Illinois Central* held that neither the State of Illinois nor the City of Chicago could transfer the public's inalienable rights in the public trust lakebed to a private party – even though the railroad to be constructed arguably had social benefits for the City and the Region. Since that time, there have been a number of Illinois and federal cases making it clear that private industrial operations do not fall within the scope of uses permitted on the public trust shore. A waste disposal facility, designed to benefit private owner/operators of industrial facilities along the CAWS, also certainly does not fall within the scope of public uses for which the shore is held in trust. Further, allowing 60 years and possibly indefinite occupation of the public trust shore by such a disposal facility to the exclusion of the public certainly cannot be considered a minor or temporary imposition on the public trust.

There can be no question that the CDF is public trust land and that its use and the public's right to use it are governed by the now well-developed legal concepts of the Public Trust Doctrine discussed above. It was built on the Lake Michigan lakebed.³ In fact all the parties to the intergovernmental agreement allowing the ACOE access for the construction and operation of the CDF implicitly and explicitly acknowledged the application of the Public Trust Doctrine to this property by requiring state legislation as a pre-condition to proceeding with the implementation process – though even that legislation did not transfer title to the State's public trust property to federal government and could not extinguish the inalienable public trust. Recognizing that this was public land, Illinois EPA, in issuing the CDF's initial 5-year permit on June 15, 1982, required both state and local implementing legislation.⁴ The intergovernmental agreement (“IGA”) regarding the CDF between the United State of America (ACOE), the Illinois International Port District and CPD was entered into July 13, 1982, two weeks after the approval of the enabling legislation. The State implementing legislation came into effect on June 29, 1982 (An Act in relation to the transfer of state and private lands to public recreational entities," Public Act 82-770, June 29, 1982.). (The Chicago Park District and the Port District also passed enabling acts or resolutions.). The intent of the ACOE at the time was summarized in an unpublished report prepared by the Illinois Department of Transportation Division of Water Resources dated December 10, 1984: "After an extensive environmental assessment, the Corps concluded that a lakefront site was the most environmentally and economically acceptable, and would provide for a major addition to Calumet Park operated by the park district, when the site was filled." (Neil R. Fulton and Daniel A. Injerd, *Lake Michigan and the Public Trust*, p.25 (hereinafter Injerd) (*emphasis added*)).

Under *People ex rel. Scott v. Chicago Park District*, 66 Ill. 2d 65 (1976), one of several seminal cases developing the public trust doctrine following *Illinois Central Railroad Co.*, the broad conception of the public interest in public trust land was expanded "to extend to the impact on surrounding recreational areas and the environmental quality of the Lake in general." *Injerd*

³ “The Chicago Area CDF was built out into Lake Michigan at the mouth of the Calumet River in 1984, with the Illinois International Port District (IIPD) Iroquois Landing site as its western boundary and the Illinois- Indiana state boundary as its eastern boundary.” DMMP/EIS Executive Summary, p. 2.

⁴ "Prior to construction or operation of this facility , legislation must be approved to allow the use of this area as a dredged material confined disposal facility." (1982 IEPA Div. of Water Permit, Sec. 8).

,quoting the Ill. Attorney General, p.23; "Application of the public trust doctrine thus limits the applicants to public bodies, or, in exceptional cases, to private non-profit parties which will perform a continuing public purpose on the site." *Injerd*, p.24 (emphasis added).

Injerd recognized that "filling in of submerged lands with polluted dredged material *may not seem to be in the public interest*", but found justification for the initial CDF on the ground that this project would "produce a number of public benefits", including "providing 45 acres of new parkland." *Injerd*, pp.25-26 (*emphasis added*). The park was initially intended by the legislation to come into existence after 10 years of operation of the CDF. We are now 37 years later, and the legislative promise is still unfulfilled. Surely the public trust doctrine requires a good faith execution by the various parties to the agreements surrounding and creating the CDF to timely implement their initial promises in exchange for creating the contaminated land fill and carrying out a use which was not in the public interest. The current proposal could keep the CDF from ever becoming the promised park. The CDF authorized by the legislature has been full for some time although its use has been extended by unapproved additions of walls and without the required legislative authority for several years. It is troubling that the Water Resources Division of the Illinois Department of Natural Resources which has oversight of the CDF as its legislatively designated trustee (615 ILCS 55) has not ordered a halt to this iterative violation of the IAG. It is equally troubling that the Chicago Park District as owner of this "parkland" has not also stepped in to halt further efforts to extend the life of the CDF. Under 615 ILCS 5/26 the Attorney General of the State of Illinois or the Cook County State's Attorney have the power to bring suit to require that these unkept commitments be carried out.

In its multiple renewals of the water permit for the operation of the CDF, the Illinois EPA, has consistently reiterated that the parties to the CDF are required to implement the promise to make it functioning parkland at the end of the permitting period. The numerous extensions and modifications of the IEPA permits for the CDF are clearly in violation of the public trust doctrine as applicable to the CDF. The ongoing private use of CPD designated park land for industrial waste dredged from the CAWS for the benefit of adjacent industrial owners and operators flies in the face of the public trust doctrine requirements. The initial enabling legislation, the IGA, and IEPA permit conditions constitute a contract under the public trust which the parties are long overdue in implementing. In fact, applying due process requirements to the various promises made regarding the limited life of the CDF now mandates that the CDF be made into functioning parkland without further delay. It is a public outrage for the Army Corps to propose another 25+ year violation of their contractual commitments. Nothing can justify this cavalier and egregious breach of the public trust. The stated rationale for creating the CDF was its conversion to parkland within 10 years. That promise has now been ignored for 27 years. There can be no doubt that the legislative intent was that this CDF become public park, if not within 10 years, certainly within a discrete, narrow time frame.

E. OPERATION OF THE CDF ON PUBLIC TRUST LAND WAS LIMITED TO 10 YEARS

There is also a serious question as to whether the State of Illinois' legislative authorization for the existing CDF limited of the ACOE's use of the State's public trust land as a dredge

depository to 10 years. Sec. 123 of the Rivers and Harbors Act expressly limits the use of CDF facilities to 10 years:

“(a) The Secretary of the Army, acting through the Chief of Engineers, is authorized to construct, operate and maintain, contained spoil disposal facilities (confined disposal facilities) of sufficient capacity for a period not to exceed ten years to meet the requirements of this section.” 33 USC 1293a

When the ACOE sought to extend its authority to allow it to operate a CDF for greater than 10 years, a United States General Accounting Office report to the House of Representative in August, 1986, concluded “we are not persuaded by the Department’s position that the Corps has authority to use the unfilled confined disposal facilities in question,…” *Water Resources Legislation Needed to Extend the Life of Confined Disposal Facilities*, GAO/RCED-86-145; p.4.

While the 10-year limitation on the ACOE’s authority was subsequently modified in another Act⁵, the State of Illinois relied on the 10-year limitation in Section 123 of the Rivers and Harbors Act in its concomitant 1982 State legislation, Public Act 82-770, which transferred the Lake Michigan public trust lakebed to the CPD. That legislation said it was “intended for the improvement of certain harbor and park facilities, in order to further the public interest and benefit navigation, including the construction, use and maintenance upon such land of a contained spoil disposal facility as *contemplated by Section 123 of Public Law 91-611.*” (*emphasis added*) At that time, 1982, Section 123 contemplated a limited 10-year life for a CDF – as shown by the above IGA report. Thus, it appears the Illinois General Assembly intended and assumed this property would be developed as a park when those 10 years had elapsed. The existing CDF has already been in construction, operation and maintenance for 27 years beyond its statutorily authorized life without being turned over to the CPD as contemplated by the Illinois legislation. Therefore, it must be closed and capped at this point.

F. A NEW NON-FEDERAL SPONSOR AGREEMENT WOULD BE REQUIRED FOR THE VERTICAL EXPANSION

Unlike the State legislation, the CPD 1982 Resolution underlying that IGA provided the ACOE with access to the site for 10 years or until the CDF is “filled”. The ACOE has now announced that the CPD will be at full capacity in 2022 and will no longer be able to accept dredge material. (Exec Sum p. 2) Therefore, at that point, CPD’s access agreement absolutely ends. Thus, this plan cannot proceed without reaching a new agreement with the CPD. The Executive Summary states that the DMMP/EIS and the selection of the TSP was “developed in partnership with the City and CPD.” (Exec Summary p. 1) However, ACOE has provided no evidence that the CPD has been involved in this process or that ACOE has obtained a new access agreement with the CPD. Notably, FOTP’s recent separate FOIA Requests to both the ACOE and the CPD have yielded no documents indicating that the CPD has been involved in the

⁵ See Section 24(a) of the Water Resources Development Act of 1988.

development of the DMMP/EIS, has concurred in the TSP for the Vertical Expansion, or has agreed to the ACOE's renegeing on its contractual commitment to return this 47 acres of lakefront to the CPD for use as park land. Thus, it is premature for ACOE to be proposing this alternative.

II. **QUESTIONS ABOUT THE PROPOSED DESIGN AND OPERATION OF THE TENTATIVELY SELECTED PLAN**

The DMMP/EIS describes the TSP as follows:

“The vertically expanded facility will occupy the same footprint as the existing CDF. It will include separate drying pads for contaminated and beneficial use material (to prevent mixing) and a new dock to facilitate the unloading of dredged material. The confined disposal area within this site will be consist of perimeter berms that are composed of beneficial use material inside of which contaminated dredged material will be placed. Prior to construction of the perimeter berms and wick drains will be installed and preloading/consolidation of the existing sediment in the facility will be carried out. During dredging operations, effluent from the wet dredged material will evaporate or drain into the dewatering pond at the south end of the site where it will be pumped to a filter cell for treatment and ultimately discharged to the Calumet River.” DMMP/EIS, p. 129.

The elements of the TSP, as described above, raise questions that are not clearly answered in the DMMP/EIS:

1. The proposal is to place both Harbor Dredge and River Dredge in this Vertical Expansion, using dried, less contaminated Harbor Dredge to create berms to contain the more contaminated River dredge material. Contrary ACOE's statements that only the 500,000 of River Dredge will be disposed of in the Vertical Expansion, this structure will actually also be the depository of a massive amount of the Harbor Dredge, if not all of it.

- How much of the Harbor Dredge will be disposed of/beneficially reused at this location, rather than beneficially reused at another non-CDF location? Where will that other Harbor Dredge be stored and dried?
- As noted in the USEPA comments, the development of an agreement between ACOE and the Non-Federal Sponsor(s) to beneficially reuse the excess material dredged from Calumet Harbor that is not required for DMDF berm construction has not been finalized and is a pre-requisite to the success of the study and proposed project, as the TSP site is otherwise inadequately sized to facilitate storage of large quantities of Harbor Dredge material.

2. The proposal is to place the entire Vertical Expansion on the footprint of the current CDF. Thus, the existing “in water” CDF will be the foundation for this massive new structure.

- What is the weight that the existing CDF will be bearing on per square foot basis?

- Where is any discussion of the ability of the existing 1984 structure to support this weight?

3. The proposal includes an air-drying operation for the less contaminated Harbor Dredge that will take place on Harbor and Lake facing pads at the CDF site (Figure 17) and will apparently entail this dredged material being exposed to the elements for over a year for each dredging event. This operation raises many questions.

- How many acres of the property will be used for this drying operation?

- How will these Harbor and Lake facing “drying pads” be protected from the high wind, rain, waves and storm surge that currently occur on the Lake Michigan shore and are predicted to be more violent in coming years?

- Won't this operation generate hazardous particulate (dust) emissions?

- What type and quantity of emissions will be generated by this drying operation?

- Will this include toxic emissions?

- Will this drying operation be regulated as a “stationary source” subject to Illinois EPA and Clean Air Act permitting? Notably, the DMMP/EIS does not account for emissions from this operation and states that operation of the TSP entails no “stationary source” emissions.

4. The proposal also assumes that “during dredging operations” the liquid in the highly contaminated dredge will evaporate.

- What type and quantity of emissions will be generated by these dredging operations?

- Will this include volatile organic emissions? Toxic emissions?

- Will these dredging operations be regulated as a “stationary source” subject to Illinois EPA and Clean Air Act permitting? Again, the DMMP/EIS does not account for these emissions and states that operation of the TSP entails no “stationary source” emissions.

5. The proposal states that effluent that doesn't evaporate will be drained to a "dewatering pond," run through a filter, and discharged to the Calumet River.

- Isn't this discharge drained to actually to the Harbor?
- What contaminants are present in the "dewatering pond" effluent and at what level?
 - What standards are applied to ensure the discharge will not degrade the River or Harbor?
- Is filtration alone considered treatment for those contaminants?
- How often will this discharge be monitored?
- Why shouldn't this effluent be discharged to the MWRD sewer systems as was assumed for each of the other disposal options reviewed in the DMMP/EIS?

6. No explanation is provided as to the purpose of the "wick drains" or how they are anticipated to function.

- Why hasn't the ACOE proposed to install a double liner and a leachate collection system for the new Vertical Expansion as would be required for any landfill accepting this highly contaminated waste stream?

7. No explanation is provided for what is meant by: "preloading/consolidation of the existing sediment in the facility will be carried out."

- Please explain the purpose of this operation and what is meant by "preloading/consolidation", how this activity will be carried out, and what the impact of this operation will be on the existing CDF structure and the sediment within it?
 - Is there a risk that operation will increase pressure on the existing CDF structure, cause a rupture, or otherwise result in increased releases from the existing CDF to the Harbor and Lake?
 - Is this an attempt to dewater the existing sediment in the existing CDF to provide greater stability for the new structure?
 - Please provide examples and data from any other CDF in which ACOE has performed this operation.

III. FLAWS AND DEFICIENCIES IN THE DMMP/EIS

A. THE DMMP/EIS RELIES ON UNDOCUMENTED CONCLUSIONS RATHER THAN OBJECTIVE ANALYSIS

The occupation of the Public Trust lakefront by a towering industrial waste landfill would never be allowed anywhere else in this City. But that is precisely what the ACOE is proposing to construct on Chicago's south Lake Michigan lakefront. As is discussed in greater detail below, instead of providing a transparent, objective review of the impacts of its proposal on the south lakefront, the DMMP/EIS repeatedly substitutes a conclusion that the southside of Chicago is already so contaminated that any additional pollution or loss of public land caused by its selected lakefront disposal option will not significantly adversely impact the community or the environment. This reflects a prejudicial characterization of existing conditions on Chicago's south lakefront and cavalier minimization of the impact of this new 25-foot high industrial waste landfill on lakefront park land.

The DMMP/EIS "no significant adverse impact" conclusions are thinly supported at best, and in some instances entirely unsupported. Indeed, portions of this study appear to have been lifted from the ACOE's 2015 Environmental Impact Study which focused on a different site. On several points it fails to address the communities, parks and beaches in closest proximity to the 2019 TSP site. For example, the DMMP/EIS entirely fails to consider the closest environmental justice community --South Chicago. The DMMP/EIS also fails to mention Steelworkers Park, directly north of the TSP site and Calumet Park Beach directly south and downstream of the TSP site. Even where it recognizes a major and historic park, Calumet Park, directly south of the site of the TSP, the DMMP/EIS provides no discussion or analysis of the impacts on users of that park – which offers youth baseball leagues, children's summer camps, day-care, and an the historic field house with a boat harbor and park programs for all ages.

Similarly, the DMMP/EIS relies on the undocumented conclusion that the CDF operated "safely" for the past 30+ years to further conclude that the Vertical Expansion and use of that CDF for another 20+ years will have "no significant adverse environmental impact" on the community or the environment. But ACOE fails to discuss the fact that the existing CDF sits "in water," that its water levels rise and fall with that of the Lake, and that it is undoubtedly in hydraulic connection with the Lake. It also provides no facts or analysis supporting its conclusion that the proposed towering waste disposal facility and associated waste management operations at this lakefront location are at no risk due to changing climatic conditions, despite well-documented increases in storm surge and the highest Lake Michigan water levels in recorded history.

Most strikingly, the DMMP/EIS fails to include Lake Michigan in its discussion of "natural resources" potentially at risk from this proposal. It concludes that the entire region is already a low-quality aquatic and wildlife habitat despite evidence of endangered species and large and diverse bird and fish populations. The DMMP/EIS never mentions Lake Michigan's invaluable role as the drinking water supply, open space, and recreational jewel of Chicago.

B. THE SELECTION OF THE VERTICAL EXPANSION IS INCONSISTENT WITH THE FEDERAL STANDARD FOR DREDGE DISPOSAL

The Federal Standard for the selection of a ACOE dredge material disposal plan is “the disposal alternative that represents the least-cost alternative that is consistent with engineering practices and meets environmental standards established by the CWA Section 404(b)(1).” 33 CFR 335.7 The DMMP/EIS states that its selected Vertical Expansion alternative meets this three-pronged standard. (Exec. Sum p. 2) FOTP respectfully disagrees. As is discussed below, the DMMP/EIS’ cost analysis is flawed, the expansion will be built on an unstable “in water” base and at a high risk location, and the plan does not support the conclusion that the current or expanded CDF at this location meets or will meet all environmental standards.

1. THE TSP IS NOT THE LEAST COST ALTERNATIVE

Contrary to the ACOE’s calculations, the Vertical Expansion is not the “least cost” option. ACOE has left out, mischaracterized, and inequitably applied significant costs, such that its cost analysis is a dangerous skewing of costs in favor of some options and against others.

a. ACOE Fails to Attribute Any Cost to the Taking the Public Trust Shore

The cost analysis provided by ACOE improperly ignores the value of lakefront land on which the Vertical Expansion will be located. ACOE does not own this land –it belongs t to the public. Yet, ACOE’s attributes no cost to the taking of this public land. In fact, taking public property, especially hugely valuable Great Lakes frontage, has an enormous cost to the public in perpetuity. This land is actually priceless and should not be bartered away for any price. If it could be valued, a fair analysis would place a value of mitigating the permanent loss of this lakebed/lakefront acreage at the price of replacement lakefront acreage in the City of Chicago.

b. ACOE Fails to Attribute Any Costs to Post-Closure Care

ACOE’s cost analysis fails to include the cost of post-closure care for any of the alternatives because ACOE will turn the site over to the Non-Federal Sponsor following closure. Depending on the location of the site, these costs may be higher or lower. In particular, management of the Vertical Expansion site will require monitoring to ensure against releases to Lake Michigan in perpetuity because of its location. Failure to include these costs skews the cost/benefit analyses toward the selection of a riskier site. But even more importantly, failure to include the cost of post-closure management skews the analysis against treatment of the sediment which would reduce the long-term hazard and the costs of managing that hazards.

c. ACOE Fails to Include the Cost of Rigorous Monitoring of the Water Quality Impacts and for Fence-Line Monitoring for Air Emissions From the Vertical Expansion and the Existing CDF

The ACOE fails to include the cost of monitoring for releases to the Lake. Because the Vertical Expansion site will contain highly toxic wastes and it is located on the Lake Michigan in

close proximity to recreational beaches and harbors and sits on a 1984 foundation that was built “in water”, it must be rigorously monitored in perpetuity to ensure against releases of contaminants to the Lake. This monitoring must include regular monitoring of the nearby Lake and Harbor water quality for compliance with the stringent Illinois Pollution Control Board Lake Michigan Basis standards. It should also include regular monitoring of the sediment and effluent contaminant levels both inside the Vertical Expansion and inside the CDF. It should include monitoring of the effluent prior to any discharge. None of these costs were recognized or included in the ACOE’s determination of the least cost option.

d. ACOE Fails to Include the Cost of Fence-line Emission Monitoring and Emission Controls

Given the location of the Vertical Expansion TSP, there is a substantial risk of windblown dust and other air pollutants from ACOE’s construction of a 25-ft mountain of dried dredge material and its proposed dredge drying and management impacting the surrounding parks and residential communities. Imagine picnicking, playing soccer, exercising, or your children in the playground in Calumet Park downwind from these operations. The costs of fence-line air pollution monitoring as well as controlling air emissions must be included in this cost attributable to this option.

e. ACOE Fails to Include the Increased Cost of Stormwater Management with the Vertical Expansion Alternative

ACOE has allocated no costs to the stormwater management challenges that must be addressed due to the location and design of each site. As discussed above, stormwater management will be particularly difficult for the Vertical Expansion site. Because of its location on Lake Michigan and its close proximity to beaches and recreational harbors, it is imperative that contaminated run-off not be discharged to the Lake and consistent stormwater management must be assumed to be required in perpetuity.

f. ACOE Fails to Include the Cost of Fortifying the Vertical Expansion and Existing CDF Against Rising Lake Waters, Storm Surge and Erosion.

Stormwater management will be useless if the Vertical Expansion site is inundated by rising Lake Michigan waters and storm surge. Yet the ACOE has ignored these threats at this location and allocated no costs for fortifying this structure against these predicted events.

g. ACOE Fails to Attribute Any Cost to the Significant Adverse Impact on Parks as a Cultural or Other Social Resource

As discussed earlier, the Vertical Expansion will entail years of a massive, dirty construction project and years of dewatering and drying 500,000 tons of toxic dredge material. Air pollution from these activities will adversely affect the residential communities in close proximity to the site as well as the use of the neighboring parks, including historic Calumet Park and its many park activities and users. No price is put on these social costs – for any of these

alternatives. Failure to recognize and quantify these costs skews the cost/benefit analysis in favor of site options which impose greater social impacts.

h. ACOE Fails to Attribute Any Cost to Significant Adverse Impacts to the Lake, Its Shore, and Wildlife Habitat

As discussed earlier, ACOE assumes there are no wildlife that will be adversely impacted by the Vertical Expansion and that Lake Michigan itself is not a natural resource. As a result, the DMMP/EIS fails to include those impacts on the cost side of the ledger.

i. ACOE Fails to Attribute Any Costs to Dredge Effluent Disposal

As discussed above, the ACOE cost/benefit analysis fails to include the cost of sewer disposal of the dredge effluent that will be generated in the operation of the Vertical Expansion, although it has included those costs for the other alternatives. Why isn't sewer disposal being required for all of the alternatives? Discharge of toxic effluent to the Harbor with mere filtration as treatment has not been demonstrated to comply with applicable water quality standards and should not be relied upon as a safe practice. Even if it had been demonstrated, the dredge effluent should be of the same quality no matter which site is selected and its treatment and disposal should be the same. Therefore, sewer disposal costs should be allocated to each alternative.

j. ACOE Fails to Attribute Any Cost to the Installation of a Double-Liner and Leachate Collection System

Given the level of contamination in the dredged materials, they should be handled and disposed of with the same safeguards that would be applied to any other industrial waste, including true containment in a facility with a double liner and leachate collection system. The costs for these systems should be included for each of the alternative options. Failure to include these costs skews the outcome of the ACOE's cost/benefit analysis against the source reduction and treatment options, as well as against management of these wastes in landfill that is actually designed to prevent releases into the environment.

2. THE TENTATIVELY SELECTED PLAN DOES NOT REFLECT SOUND ENGINEERING PRACTICES

Friends of the Parks has long questioned the ongoing risk to the Lake, the shore, our region's water supply, and surrounding parks and beaches due to the existing CDF being located where it is. The Vertical Expansion TSP relies on the existing 1984 CDF structure which was constructed as an "in water" containment for 10 years of dredged material to provide a foundation for a towering and immensely heavy addition. FOTP has serious concerns about this proposal. What assurance can the Corps give the public that placing another million tons of dredge on top of the 1984 CDF will not result in an increase of releases of contaminants to the environment or even a catastrophic rupture or collapse of that structure? The DMMP/EIS provides little discussion of the engineering assumptions that the ACOE is relying upon.

What we do know is that the ACOE has monitored water levels in the CDF and found that they go up and down with the Lake water levels. This indicates that this new addition will essentially be built on a floating foundation. Further, as the dredge in the existing CDF consolidates, won't this foundation sink? Given the location of this structure on Lake Michigan and in the vicinity of parks and beaches, constructing a towering addition on this unstable foundation suggests a grave risk.

The proposed Vertical Expansion will apparently rely on a liner constructed of dried Harbor Dredge to isolate the new dredge from the old CDF dredge, but the DMMP/EIS provides little discussion of that liner. What is the risk if that liner fails? What is clear is that ACOE is not proposing a double liner with a leachate collection system. Thus, liquids from newly placed dredge material will be collecting in the new structure. The new structure will contain "wick drains", but not a leachate collection and monitoring system. Given the hazardous materials that will be permanently deposited at this environmentally sensitive location, this failure to take the utmost precaution in building this new structure and using state-of-the-art technologies to ensure against releases to the environment is reckless. Double liners and leachate collection and monitoring systems have been required for hazardous waste landfills for decades. They are generally installed to ensure against leakage impacting groundwater. Here the concern is even greater – leaking affecting a surface water used as a public water supply and recreational resource. The cost of a double liner and leachate monitoring and collection system should be built into the cost analysis for the Vertical Expansion.

The DMMP/EIS also provides little discussion of stormwater management for this proposed new structure. The proposal for the Vertical Expansion relies upon existing drains at the perimeter of the CDF on the Lake and Harbor sides to transport stormwater to a storm water pond on the site. What is the likelihood of this drainage system and the pond being overwhelmed with the greater volume and velocity of stormwater that will be created by the new surface area and steep slope of this new "compact" 25-foot structure? Historic surface monitoring reports refer to instances in which stormwater runoff from the existing CDF has overwhelmed the drainage system and caused contamination of the adjacent surface water. This prospect will be even greater with the Vertical Expansion.

The DMMP/EIS also doesn't discuss how the Vertical Expansion will be engineered to withstand the rising Lake waters and increased storm surge and storm intensity predicted to be caused by climate change in the future. The ACOE simply denies that climate change will have any impact on any of the proposed alternatives. This is irresponsible, especially when the TSP would be located directly on the shore of one of the Great Lakes and the ACOE is well-aware of the damage that rising waters and severe weather is already having on structures on the Lake Michigan shore in the Chicago and Northwest Indiana area. This structure would be even more vulnerable than most given that it is proposed to be built on a foundation that is hydrologically connected to the Lake and contains water that fluctuates with Lake levels. USEPA makes this same point in its July 22, 2019 Comments on the DMMP/EIS. If the ACOE continues to pursue the Vertical Expansion alternative, it must go back to the drawing board and engineer this structure to withstand the predicted impacts of climate change on this new structure that will be sitting and must incorporate the costs of doing so into its cost analysis for this alternative.

3. THE TSP DOES NOT MEET APPLICABLE ENVIRONMENTAL STANDARDS

Clean Water Act Section 404(b)(1) provides that dredge disposal sites are to be selected consistent with guidelines developed by USEPA. Those Guidelines require compliance with all other applicable state and federal standards as well as the requirements of NEPA. Further, Section 230.10 (b) of the Guidelines specifically restrict the discharge of dredged material if it “Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard” or if it results in the likelihood of the destruction or modification of critical habitat under the Endangered Species Act. Section 230.10(d) provides “... no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.”

a. ACOE’s Claims That Environmental Standards Have Been Met and the CDF Has Not Adversely Impacted the Environment Have No Factual Basis

ACOE claims “The Chicago Area CDF has been in safe operation for more than 30 years and it has provided a cost-effective means for managing contaminated dredged material from the Calumet Harbor and River and Chicago Harbor.” (Exec Sum 5) But the ACOE provided no data to support this contention in the DMMP/EIS and only after FOTP made a FOIA Request was any environmental data made available to the public. This failure to provide data is surprising given that back in 2015 USEPA expressly advised ACOE that environmental data should be included in an Appendix to an EIS. Further, the fact that it took ACOE almost a month to compile the environmental data FOTP requested indicates that such data was likely was not reviewed by ACOE before it made its selection of the Vertical Expansion as its proposed TSP and before ACOE concluded that the CDF had operated safely for over 30 years. Moreover, the data that ACOE ultimately provided to FOTP does not support the conclusion that the Chicago CDF has successfully “contained” contaminants in the dredge material effluent or that the placement of another 1 MM tons of material on top of that 1984 structure will not cause even greater releases of toxic contaminants from that structure into Lake Michigan.

b. The CDF Has Never Actually Contained the Contaminants in the Sediment

ACOE admits that the dredge material is too contaminated “to be placed in open water or unconfined upland locations.” DMMP/EIS, Exec. Sum., p. 2. Only materials that are unsuitable for open-water or beneficial reuse are managed in CDFs. The dredge material here is unsuitable “for open water placement or in-water beneficial reuse” due to its high contaminant levels. Exec. Sum., p. 3. Sediment quality is not suitable for open-water placement “based on most recent testing.” Exec. Sum., p 6. Indeed, the list of contaminants in the dredged material identified for Calumet Harbor and River sediment includes a number of highly toxic and hazardous constituents, including “arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, zinc, ammonia nitrogen, oil and grease, phosphorus, cyanide, and PCBs.” DMMP/EIS, p. 29.⁶

⁶ The Harbor sediment was apparently also tested for Semi-Volatile Organics (“SVOCs”) in 2000 (*Id.*); however, that data is not provided or discussed in the DMMP/EIS. Nor is any SVOC data provided for the River sediment.

It follows that the CDF option must actually “contain” the contaminants in the dredged material. Surely, if these dredged materials are unsuitable for “open lake” disposal miles out in deep water, they are also unsuitable for “in water” management in a structure that is located in shallow water that is in constant interaction with the Lake water and is upstream from parks and beaches.

Indeed, the DMMP/EIS acknowledges that the existing CDF has never actually contained the dredged sediment. Rather, it was designed to allow contact with the waters of Lake Michigan.

“The existing Chicago Area CDF is slightly different because it was, at the time of its original construction, an in-water facility. First, the bottom of the existing CDF is the naturally occurring clay bottom “bed” material of Lake Michigan, rather than a constructed liner. Also, because the facility was built in the waters of Lake Michigan, the sediment was placed into water and remained under water until the facility became full enough to reach the surface. It did not start to “air dry” until the facility was nearly filled with sediment.” DMMP/EIS at p. 82. [*emphasis added*]

The fact that the water levels inside the CDF fluctuate with the water levels in the Lake demonstrates that the CDF is hydraulically connected to the Lake. This hydraulic connection can be seen from the water level measurements inside and outside the CDF taken in 1986 after the “sand blanket” had been put in place and at least several times thereafter.⁷ The ACOE does not deny that the CDF is an “in water” facility and that it is hydraulically connected to the waters of the Lake. But, ACOE maintains that by keeping the water levels in the CDF below the water levels outside the CDF, it can create a pressure differential that prevents the effluent from leaving the CDF. Whether or not this pressure differential could theoretically prevent contaminated water from mixing with Lake water, it is indisputable that when water levels in the CDF go up and down with Lake levels, as demonstrated in 1986, the waters are mixing and contaminated water is being released from the CDF to the Lake.

The DMMP/EIS never discusses whether or not there haven’t been releases from the existing CDF to Lake Michigan. Something that is an obvious concern given the location of the CDF “in water” and its known hydraulic connection to the surrounding waters. Indeed, the DMMP/EIS provided no environmental data and the ACOE only subsequently provided its historic monitoring data in response to a FOIA Request filed by FOTP. Even that data, does not include water quality monitoring data for the most toxic contaminants of concern in the River and Harbor sediments placed in the CDF.

These deficiencies in monitoring data make it impossible for the ACOE to have reached a fact-based conclusion that the CDF has operated “safely” for over 30 years, as it contends. Indeed, the opposite conclusion is required from the facts that the sediments placed in the CDF

⁷ See 1988 Study, Figure 2 – “Chart of CDF Water Level vs Lake Michigan Water Level Following Sand-Blanket Construction” and Figure, 4. 1997 Water Quality Monitoring Report for Routine Monitoring Events at the Chicago Area Confined Disposal Facility.”

are highly contaminated and unsuitable for open lake disposal and that the CDF is hydraulically connected to the surrounding Lake waters.

c. The DMMP/EIS Fails to Consider Applicable Environmental Standards

The DMMP/EIS fails to identify the environmental standards that are applicable to the CDF and that ACOE reviewed in order to reach its conclusions that the existing CDF and the Expansion of that facility will meet all applicable environmental requirements and will not cause a “significant adverse impact.” The DMMP/EIS references only two standards: 1) the federal Toxic Substances Control Act’s PCB standard; and 2) the Illinois and federal risk-based standards for clean-up of contaminated properties. But neither of these is relevant to the operation of the “in water” CDF and expansion thereof or to the air drying and dewatering operations proposed in the CDF. Rather the key questions are whether the CDF has met air and water quality standards.

Incredibly, the DMMP/EIS fails to reference the applicable water quality standards, and, in particular, fails to reference the applicable Illinois Pollution Control Board (“Board”) water quality standards specifically adopted for the Lake Michigan Basin and Calumet Harbor. 35 Ill. Adm. Code 302.501 et seq. Rather, for PCBs, the ACOE suggests we should take comfort from the fact that “none of the past sediment samples have exceeded the 50 mg/kg PCB regulatory threshold under TSCA,” although PCB’s in the River sediment were found up to 39 mg/kg in 1989. DMMP/EIS at 29-30. In contrast, U.S. Environmental Protection Agency (“USEPA”) considers PCBs a probable human carcinogen and prohibits industrial discharges under the Clean Water Act Effluent Guidelines. EPA has set the enforceable Maximum Contaminant Limit for PCBs in public water systems at 0.0005ppm. However, EPA’s goal for drinking water’s maximum contaminant level is zero. Indeed, there are many who would say there is no safe level of PCBs in the environment given its carcinogenicity and its potential to bioaccumulate in humans and wildlife. Due to PCBs high bioaccumulation factor, the Board has established a Human Health WQS for PCBs in the Lake Michigan Basin of $26 \times 10^{-12} \text{ kg} / \text{m}^3$.

The TSCA and Risk-Based Clean-Up standards referenced in the DMMP/EIS are *certainly* not the applicable water quality standards that the ACOE should be reviewing to determine whether the CDF is adversely affecting the environment. Rather, due to the location of the CDF and its hydraulic connection to Lake Michigan, the Board’s Lake Michigan Basin water quality standards in 35 Ill. Adm. Code 302.501 et seq. are the correct WQS to apply to the impact of releases from the CDF to water.⁸

The monitoring reports made available in response to FOTP’s FOIA Request show that ACOE monitors water quality near the Lake Michigan face of the CDF but ceased monitoring the surrounding Lake or Harbor waters for PCBs, mercury, arsenic, cyanide, lead and other metals in 1997. This is a concern. For example, PCBs and Mercury, both constituents of concern

⁸ Although the CDF may also be hydraulically connected to water in Calumet Harbor, the Board’s Lake Michigan Basin standards are the more stringent and thus should be the applicable standard for releases from the CDF.

that continue to be identified in the dredge sediment, are both known to dramatically bioaccumulate. The Board has established specific standards for “bioaccumulative chemicals of concern” which it defines as follows:

“Bioaccumulative chemical of concern” or “BCC” is any chemical that has the potential to cause adverse effects and that, upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor greater than 1,000, after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation, in accordance with the methodology in Section 302.570.” 35 Ill. Admin. Code. 302.501

For these BCC, the Board has established “acute aquatic life standards (AS) [which] must not be exceeded at any time in any waters of the Lake Michigan Basin and chronic aquatic life standards (CS), human health standards (HHS), and wildlife standards (WS) [which] must not be exceeded in any waters of the Lake Michigan Basin by the arithmetic average of at least four consecutive samples collected over a period of at least four days subject to the limitations of Sections 302.520 and 302.530.” 35 Ill. Admin. Code 504(e). (*emphasis added*)

Section 302.504(e) of the Board rules provides the applicable standards for BCCs in the Lake Michigan Basin, including PCBs and Mercury, as follows (*emphasis added*):

<u>Constituent</u>	<u>Unit</u>	<u>AS</u>	<u>CS</u>	<u>HHS</u>	<u>WS</u>
Mercury (total)	ng/L	1,700	910	3.1	1.3
Chlordane	ng/L	NA	NA	0.25	NA
DDT and metabolites	pg/L	NA	NA	150	11.0
Dieldrin	ng/L	240	56	0.0065	NA
Hexachlorobenzene	ng/L	NA	NA	0.45	NA
Lindane	µg/L	0.95	NA	0.5	NA
PCBs (class)	pg/L	NA	NA	26	120
2,3,7,8-TCDD	fg/L	NA	NA	8.6	3.1
Toxaphene	pg/L	NA	NA	68	NA

where:

mg/L = milligrams per liter (10^{-3} grams per liter)

µg/L = micrograms per liter (10^{-6} grams per liter)

ng/L = nanograms per liter (10^{-9} grams per liter)

pg/L = picograms per liter (10^{-12} grams per liter)
fg/L = femtograms per liter (10^{-15} grams per liter)
NA = Not Applied

The IPCB has also established specific Lake Michigan Basin standards for other pollutants, which include Arsenic, Barium, Lead, Manganese, and Phosphorous -- all contaminants of concern identified in the sediment and referenced in the DMMP/EIS.

“In addition to the standards specified in subsections (a) and (b) of this Section, the following standards must not be exceeded at any time in the Open Waters of Lake Michigan⁹ as defined in Section 302.501.

Arsenic (total) $\mu\text{g/L}$ 50.0
Boron (total) mg/L 1.0
Barium (total) mg/L 1.0
Chloride (total) mg/L 12.0
Fluoride (total) mg/L 1.4
Iron (dissolved) mg/L 0.30
Lead (total) $\mu\text{g/L}$ 50.0
Manganese (total) mg/L 0.15
Nitrate-Nitrogen mg/L 10.0
Phosphorus $\mu\text{g/L}$ 7.0
Selenium (total) $\mu\text{g/L}$ 10.0
Sulfate mg/L 24.0
Total Dissolved Solids mg/L 180.0
Oil (hexane solubles or equivalent) mg/L 0.10
Phenols $\mu\text{g/L}$ 1.0

The Board has also established Human Health Standards that must not be exceeded in the Open Waters of Lake Michigan for other highly toxic contaminants that the DMMP/EIS does not reference, but some of which may exist in the dredge sediment as indicated by the fact that 2006 boring samples showed staining, hydrocarbon odors, and sheens¹⁰:

... d) In addition to the standards specified in subsections (a), (b) and (c) of this Section, the following human health standards (HHS) must not be exceeded in the Open Waters of Lake Michigan as defined in Section 302.501 by the arithmetic average of at least four consecutive samples collected over a period of at least four days. The samples used to

⁹ “Open Waters of Lake Michigan” means all of the waters within Lake Michigan in Illinois jurisdiction lakeward from a line drawn across the mouth of tributaries to Lake Michigan, but not including waters enclosed by constructed breakwaters. 35 Ill. Adm. Code 302.501

¹⁰

demonstrate compliance with the HHS must be collected in a manner which assures an average representation of the sampling period.

Benzene µg/L 12.0
Chlorobenzene µg/L 470.0
2,4-Dimethylphenol µg/L 450.0
2,4-Dinitrophenol µg/L 55.0
Hexachloroethane (total) µg/L 5.30
Lindane µg/L 0.47
Methylene chloride µg/L 47.0
Trichloroethylene µg/L 29.0

These Board Standards for the Lake Michigan Basin are the WQS standards which the ACOE should be using to determine whether the water within the CDF and its Vertical Expansion which is being released to the Lake meets environmental standards and whether these releases have or will have an adverse impact on Lake Michigan water quality.

Data provided by the Army Corps of Engineers fails to examine the effectiveness of filtration as a treatment option. Further, it fails to demonstrate that releases have not occurred from the CDF. Specifically, ACOE has sampled the Harbor and River water quality and found it to be highly impaired, but has failed to differentiate whether the sources of contamination present in water, sediment, and groundwater outside the containment is caused entirely from historical uses of the river and harbor, or if contaminants in the dredge spoils deposited in the containment have been released from the CDF. Further, ACOE has failed to monitor the impact of many toxic constituents of the sediment in the CDF on water quality in the Lake. It is not sufficient to say that the Harbor and Lake are already impaired water bodies. The Clean Water Act prohibits the further impairment of these waters. By failing to undertake a monitoring regime designed to determine if toxic contaminants are being released to Lake Michigan, as required by Congress in 1988¹¹, ACOE has failed to provide evidence that would support its conclusion that the CDF has operated “safely” and has also failed to protect the Lake, its habitat, the water supply the City relies upon, and the Environmental Justice communities that use the neighboring beaches and harbors.

Values of metals, including chromium, manganese, zinc, lead and arsenic, as well as PCBs and phosphorous, in the dredged material and the Harbor River are consistently sufficiently high that concerns should be raised about the concentration of these materials in a CDF that was actually built in the water and its hydrologically connected to the waters of the Lake. Before the ACOE proceeds with its selection of the Vertical Expansion of this CDF, it must provide a data-based analysis of the public health impact of managing this contaminated material on the lake front and in close proximity to public beaches and harbors.

¹¹ See Section 123(k) of the River and Harbor Act of 1970 (33 U.S.C. 1293a), Public Law 100-676 November 17, 1988.

The impacts on wildlife from the concentration of these contaminants in an “in water” CDF on the Lake Michigan shore must also be considered. According to the ACOE and USEPA study titled “Great Lakes Confined Disposal Facilities,” April 2003, https://www.lrd.usace.army.mil/Portals/73/docs/Navigation/GL-CDF/GL_CDF.pdf, the bioaccumulation of PCBs in wildlife in dredged material CDFs is an issue which has received a fair amount of laboratory and field study.

Extensive monitoring studies have shown that some, but not all contaminants in dredged material will bioaccumulate in fish and wildlife within CDFs. In general, uptake of metals is not a significant issue and vegetation has not shown much potential for bioaccumulation. PCBs and other hydrophobic organic contaminants will accumulate in the tissues of fish inside CDF ponds, and may be a significant source of contamination to animals that feed on them (Marquenie et al 1987; Dorkin et al 1988; Marquenie et al 1990; Stafford et al 1991). *Id.* at p. 38.

This ACOE/USEPA study references a study at the Chicago Area CDF (Dorkin et al 1988) which measured PCB concentrations in the tissues of fish, crayfish and periphyton collected within the CDF. The concentrations of PCBs in wildlife collected from within the CDF were higher than those collected in the adjacent harbor, and the levels found were very consistent with those projected using a theoretical approach (equilibrium partitioning). *Id.* at p. 30

Also, according to ACOE/USEPA Study, at p. 29, the types of plants and animals inhabiting CDFs and the bioaccumulation of dredged material contaminants has been extensively studied at the Times Beach CDF in Buffalo, New York. This facility was constructed in 1976, but was only partially filled, in part, because of concerns raised by the local Audubon chapter about the high-quality habitat that it supported. This CDF was used as a laboratory for long-term studies of bioaccumulation by aquatic and terrestrial plants and animals and possible effects on organisms including growth, reproduction, vitality and carcinogenicity. (Marquenie et al 1987; Marquenie et al 1990; Stafford et al 1991). The following impacts on plants and wildlife were noted¹²:

- The uptake of organic pollutants was insignificant.
- Levels of cadmium, chromium, iron and possibly arsenic were higher than normally found in wetland plant communities of the Great Lakes.
- Earthworms incubated in CDF sediments were found to have increased levels of heavy metals, PCBs, and PAHs.
- Fish samples collected from the open water at the CDF did not accumulate elevated levels of heavy metals, but they did have elevated levels of PCBs and PAHs.
- In addition, there were significant numbers of tumors found on the fish, especially carp, which were in contact with the contaminated sediments

¹² Marquenie, J.M., Simmers, J.W., Rhett, R.G. and D.L. Brandon. 1990. “Distribution of PCB and Pesticide Contaminants in the Vicinity of Times Beach Confined Disposal Facility, Buffalo, NY.” Miscellaneous Paper EL-90-24, USACE Waterways Experiment Station, Vicksburg, MS.

d. The DMMP/EIS's Air Pollution Analysis is Deficient

The air quality monitoring the ACOE discusses the regional air monitor at George Washington High School, more than 3 miles from the current CDF site. But it fails to address the potential for local quality impacts within the parks and residential communities surrounding the proposed TSP site. Mobile sources, trucks and heavy equipment used in the construction of the new facility, as well as in the dredge management operations at the facility is of concern. However, there are also stationary source concerns that ACOE fails to consider. As noted above, the ACOE is proposing a new dredge drying operation that should be permitted as a stationary source. The DMMP/EIS fails to discuss the possible impact on the existing CDF or the proposed Vertical Expansion on air quality throughout the area or locally and has skirted stationary source air pollution permitting.

Among other air pollutants, volatilized PCBs could be an issue for the CDF and its expansion and drying operations. As noted in the ACOE/USEPA Study, "Great Lakes Confined Disposal Facilities", April 2003:

Volatilization studies examine the loss of contaminants from the surface of the CDF directly into the air. This is especially relevant where the dredged material contains high levels of volatile contaminants (e.g., polynuclear aromatic hydrocarbons or polychlorinated biphenyls) which could create localized air quality problems near the CDF or could contribute to overall contaminant loadings to the region. Volatilization can occur from either exposed or submerged sediments. Modeling studies Great Lakes Confined Disposal Facilities: April 2003 28 Figure 36: Wildlife at Saginaw Bay CDF (Thibodeaux 1989) have indicated that the losses from sediments directly exposed to air are greater than from those that are submerged." *Id.* pp.27-28

In fact, the ACOE/USEPA 2003 CDF Study at p.28 references a study of the volatilization rates from the Chicago Area CDF at Calumet Harbor, which used equilibrium partitioning theory and field sampling (Semmler and Holson 1994). The study showed that *volatile flux of PCB from sediment to water to air may be a significant loss pathway*. It also conceptualized CDF management strategies to minimize loss of volatile contaminants, including wind barriers and maintenance of high organic carbon content in the surficial sediment layer. Semmler, J. and T. Holson. 1994. "PCB Volatilization from a Confined Disposal Facility," report prepared for master's thesis, Illinois Institute of Technology, Chicago, IL.

The Occupational Safety and Health Administration (OSHA)'s permissible exposure limit (PEL) for airborne PCBs is a time-weighted average (TWA) concentration of 1.0 milligrams per cubic meter (mg/m^3). The National Institute of Safety and Health's air workplace standard for PCB 10-hour exposure is an order of magnitude lower -- $1.0 \mu\text{g}/\text{m}^3$. Both standards encompass all physical forms of these compounds: Aerosols, Vapor, Mist, Sprays, and PCB-laden dust particles. OSHA also recognizes that PCBs can be absorbed through the skin; therefore, suggests both dermal and inhalation exposure routes should be evaluated by an industrial hygienist.

The ACOE/USEPA 2003 CDF Study demonstrates that ACOE is clearly aware of the potential for localized and regional air pollution impacts emanating from dredge evaporation, drying, and windblown dust at the CDF. Yet, the DMMP/EIS provides no substantial analysis or discussion of these risks to neighboring communities, parks, the Lake, and beaches. Instead, ACOE hastily concludes the TSP will have no significant adverse air impacts. It also provides no discussion of monitoring or site and materials management to reduce these risks.. Further, by proposing a final cover for the CDF of only 6 inches of clean fill on top of harbor dredged material, the ACOE will be leaving the Non-Federal Partner with a mountain of dredge material that will quickly be exposed by the elements and blown into the surrounding communities and parks, as well as neighboring Lake Michigan and nearby beaches. substantial risk of windblown dust and other air pollutants from ACOE’s construction of a 25-ft mountain of dried dredge material and its proposed dredge drying and management impacting the surrounding parks and residential communities. Imagine picnicking, playing soccer, exercising, or your children in the playground in Calumet Park downwind from these operations.

The final DMMP/EIS must provide an analysis of air emissions emanating from all CDF operations during its active life, and steps that will be taken to monitor and control those emissions throughout the life of the CDF. In its July 22, 2019 Comments, USEPA recommends that ACOE provide fence-line air quality monitoring for this proposed TSP. We agree. Further, ACOE must incorporate measures to control air emissions from these operations. The costs for this monitoring system and air emission controls must be included in the costs attributable to the Vertical Expansion TSP.

C. THE ENVIRONMENTAL IMPACT STUDY FAILS TO MEET NEPA STANDARDS

The Environmental Impact Study site selection screening and evaluation of adverse impacts presented in the DMMP/EIS is also flawed and deficient – both procedurally and substantively.

1. THE DMMP/EIS SITE SCREENING PROCESS WAS DEFICIENT

ACOE’s claims that the DMMP/EIS “builds upon the analysis that was completed for the Draft Chicago Waterways, Dredged Material Management Plan and integrated EA (Draft CAWS DMMP) released for public comment in June 2015.” (Exec. Summary, p. 1). This is untrue and disingenuous. In fact, the 2015 draft DMMP and draft EIS did not include the option of a Vertical Expansion of the existing CDF. (DMMP/EIS, p. 138) ACOE publicly admitted that it only landed on that option in November 2018 and proposed it shortly thereafter in January 2019 (ACOE Public Meeting 4/13/19). ACOE cannot claim it provided extensive public input on its TSP when it selected an option that until January 2019 it had assured the public was not a possibility. A “scoping” process eliminates alternatives – it does not conclude with the selection of a new and different alternative outside the original scope of review. Similarly, ACOE cannot rely on “resource agencies” concurrence in a previously selected TSP as concurrence in this newly identified option.

The two public hearings held in rapid succession after the issuance of the DMMP/EIS and before members of the public had environmental and engineering data which ACOE claims to have relied upon, were hasty and insufficient. They did not provide the public, interested community groups, and local government officials –especially the new Mayor and her administration – with enough notice and opportunity to review and vet the environmental and cost impacts associated with this new proposal. Also, to our knowledge, ACOE did not provide or publish notice of its new proposal and the issuance of the Draft DMMP/EIS in Spanish or provide a translation of the Draft DMMP/EIS in Spanish as required based on the high proportion of Spanish-speaking residents in the neighboring Environmental Justice communities.

Given these procedural deficiencies, coupled with the many substantive deficiencies in the DMMP/EIS, the ACOE cannot proceed to a Final DMMP/EIS on the proposed TSP as a next step, but rather must go back and provide a revised Draft DMMP/EIS for public review and comments that responds to the many flaws and deficiencies noted herein. The public notice and revised DMMP/EIS should be translated into Spanish. Public hearings must be held on that revised Draft DMMP/EIS and the ACOE should provide a Spanish translator for those hearings.

2. SITE SELECTION SCOPING CRITERIA

Section 3.10.5 of the DMMP/EIS discusses a number of site screening criteria it used when it developed the final study alternatives, which included adding the Vertical Expansion to the list of alternatives. FOTP believes at least three criteria are clearly not met in the case of the Vertical Expansion alternative.

a. Avoidance of High-Quality Habitat

The DMMP/EIS states that one of the ACOE’s criteria for site selection is the “Avoidance of High Quality Habitat” must be met for all federal environmental standards including those established by Section 404 of the Clean Water Act. (DMMP/EIS, p. 85). Based on this criteria, the Vertical Expansion should not have been included in the final alternatives because of its location in and adjacent to Lake Michigan and its associated high quality habitat, including endangered species.

b. Avoidance of Contaminated Sites

Screening for site selection should also avoid contaminated sites (DMMP/EIS, p.85) The existing CDF is a contaminated site. Indeed, it is filled with highly contaminated dredge materials and effluent therefrom. Further, it is a high risk contaminated site because the existing CDF is a 1984 structure, never designed to hold or act as the foundation for another 1 million tons of dredge material, and which is hydrologically connected to a highly valuable natural resource. The failure of the CDF – especially with Lake Michigan waters at their highest levels in recorded history and increasing storm surge predicted by FEMA -- could have catastrophic consequences for the water supply serving millions of people and a huge

recreational and habitat resource. The DMMP/EIS rejects other upland sites based on much less contamination or risk.

c. Environmental Conditions

The CMMP/EIS (p. 86) discusses this screening criteria as one that concerns the prospect of litigation or requirements for remediation that could delay the project, rather than a real concern about risks to the environment. But the risk of contamination of Lake Michigan from the existing and expanded CDF is more than a concern about liability or delay. Further, even as a matter of liability risk, the possibility of worsening releases from or a rupture of the existing and expanded CDF – even if considered unlikely – presents a huge liability for the ACOE and/or the CPD or another Non-Federal Sponsor. Indeed, in a worse case, this liability could include contamination prohibiting use of Chicago’s southside beaches and harbors, contaminating Chicago’s water supply, and/or destroying Lake Michigan wildlife habitat. (See USEPA July 22, 2019 Comments.)

d. Cultural Resources

Another screening criteria is listed as “Cultural Resources: No Historic Landmarks. – Impacts to significant cultural resources, particularly those identified on the National Register of Historic Places (NRHP), existing parks, etc. should be avoided.” (DMMP/EIS, p. 86) The Vertical Expansion will be located between two parks, Steelworkers Park and Calumet Park. Further, the EIS recognizes that historic Calumet Park, the park that will be most directly impacted by the Vertical Expansion, is on the National Register of Historic Places and its field house is on the list of Chicago City Landmarks. The existing CDF is not only a source of contamination of those parks, it is an intimidating, eye-sore for those using the parks – a military style chain-link fenced, and camera-monitored fortress. It will become even more polluting and intimidating if the proposed Vertical Expansion is allowed to go forward. Clearly, the Vertical Expansion options should have been eliminated from consideration based on this criteria.

3. ENVIRONMENTAL CONSEQUENCES

a. Water Resources & Water Quality

ACOE claims that all alternatives other than “no action” provide the environmental benefit of cleaning up legacy contaminants in the River and Harbor. (DMMP/EIS, p. 97) This doesn’t take into account the impact of concentrating those legacy contaminants in one place. In the case of the Vertical Expansion alternative, this concentration of legacy pollutants is being placed on the shore of Lake Michigan at the same location where these sediments have for the last 35 years been allowed to interact with Lake Michigan water and have contributed to contamination of this precious resource. The proposed extension will concentrate another 1 million tons of those legacy pollutants in a 25 foot tower resting precariously on a 1984 structure never intended for this purpose and located on the edge of Lake Michigan. Further, toxic run-off and effluent from these legacy pollutants is being and is proposed to continue to be discharged back into the Harbor – with only filtration as treatment.

ACOE fails to recognize to mention these significant environmental consequences in its discussion of Water Resource and Water Quality.

b. Sediment Quality

The DMMP/EIS (p. 96) again makes the claim that “confining” the highly contaminated sediment will be a public benefit. But, as to the Vertical Expansion alternative, the ACOE fails to state that the sediments in the existing CDF are NOT CONFINED! The existing CDF that will be the foundation of the Vertical Expansion was designed as an “in water” structure that would allow the dredged material to be hydraulically connected to the waters of Lake Michigan. This type of structure should never have been used for highly toxic dredge materials involved here. The impact of placing the weight of another 1 million tons of this material on top of this 1984 structure, 500,000 of which is highly contaminated wet dredge material, is unknown, but clearly this foundation and this location coupled with the quality of the sediments involved presents the risk of additional contamination of the Lake and Harbor.

Further, the DMMP/EIS fails to state that the highly toxic quality of this sediment yields a highly toxic effluent that must be managed. In the case of the other alternatives, that effluent will be sent to the Metropolitan Water Reclamation District via sewer. But, in the case of the Vertical Expansion, the ACOE plans to simply discharge it to the Harbor. Neither the DMMP/EIS nor the environmental data and reports provided to FOTP in Response to its FOIA Request include data on the quality of that discharged effluent in the past. But what we know is that the only treatment it is receiving is filtration – a process that is designed to remove particles, but not dissolved contaminants. Given the highly contaminated nature of this sediment, filtration alone is insufficient and the Vertical Expansion alternative should include the installation of a sewer connection and discharge to the MWRD.

Contrary to ACOE’s suggestion that containing these highly contaminated sediments in a CDF is a solution, these highly contaminated sediments will continue to present a risk and have to be managed in perpetuity – especially under the Vertical Expansion alternative. These costs are not mentioned in the EIS or in this section on environmental consequences. Only treatment of these sediments to reduce toxicity will eliminate the risk rather than just pass it on to the Non-Federal Sponsor.

c. Topography and Geology

The DMMP/EIS (p. 96) fails to discuss the fact that the construction of a 25 foot, steeply sloped hill on the Vertical Expansion site is a major and adverse change to the CPD park land. This will make the site almost entirely unusable as a park and difficult to manage. Further, the steep slope required for the “compact” CDF Vertical Expansion will increase the quantity and velocity of the stormwater run-off, making stormwater management difficult and intensive. This responsibility will extend beyond the active life of the TSP and become a substantial cost for the CPD or any other Non-Federal Sponsor of the Vertical Expansion.

d. Hydrology & Hydraulics

The DMMP/EIS (p.97) states, “None of the proposed action alternatives would have a significant impact on hydrology and hydraulics within the study area.”

The DMMP/EIS recognizes changes in runoff patterns will occur, but assumes these changes will not have a significant adverse impact while providing no evidence or analysis. In fact, creating a 25 foot hill on previously flat land on the shore of a Great Lake – or anywhere -- will dramatically change the volume and velocity of run-off from that property. In the case of the Vertical Expansion, this dramatic change in topography will create particularly difficult stormwater management challenge for the ACOE and the CPD and any other non-federal partner in perpetuity in order to prevent run-off from flowing into Lake Michigan.

e. Air Quality

The discussion of environmental consequences in Section 4.4. Air Quality (p.97-98) focuses solely on temporary emissions from mobile sources associated with construction and dredge placement activities – and assumes these will be minimal. We respectfully disagree that construction of a 25 foot hill out of dredge material is a non-significant activity or that it will have insignificant air quality impacts that are limited to mobile sources. Further, this massive and dirty construction activity will be taking place between two parks – one of which honors former steelworkers and is frequented by senior citizens, another which is home to summer camps, youth baseball and soccer leagues, a daycare center, a picnic grove, tennis courts, basketball courts, gymnastics, classes and activities of every sort, and which host community events, such as Movies in the Park, Shakespeare in the Park, concerts and charity races.

This section also fails to recognize that the air-drying operation and other on-site dredge management activities proposed for all of the alternatives have the potential to generate substantial on-going emissions, including toxic emissions. See our discussion of air emissions in above.

A CDF is a stationary source of continuing emissions which should be permitted as such by Illinois EPA. Further, because all of the proposed alternatives, including the Vertical Expansion TSP, are all located in an Environmental Justice area, greater discussion and analysis of these air pollution impacts is required in an EIS.

f. Climate Change

The DMMP/EIS (p.98- 99) makes a blanket, unsupported statement that “changing climate conditions in the future would not have a significant impact on a proposed DMDF on any of the alternative sites.” But this entirely fails to consider the impacts on the Vertical Expansion alternative from increased precipitation, rising Lake Michigan waters, and increased storm intensity and storm surge predicted by the Federal Emergency Management Agency (“FEMA”) on the Lake Michigan shore. While FEMA and Coastal Agencies are warning residents against building too close to the shores of the Great Lakes, ACOE is proposing to construct a precarious

addition to a structure holding millions of tons of toxic waste on the shore of Lake Michigan. See USEPA, July 22, 2019 Comments.

g. Riverine Habitat, Aquatic Communities, And Non-Aquatic Communities

The DMMP/EIS (p. 99) makes quick work of these three categories of environmental consequences based on the assumption that the areas in which five alternative sites, including the Vertical Expansion, are located are already degraded environments. This lack of analysis of the incremental impacts of the proposed massive, dirty projects on these habitats is unacceptable in an Environmental Impact Statement and must be revisited. As the ACOE is well-aware the City of Chicago, state, county and federal agencies, Southside community organizations, and multiple non-profit planning and environmental organizations have been actively engaged in projects to recover the natural environment from these areas of historic industrial degradation. Indeed, expansions of landfills have been banned in Chicago precisely because of the adverse impacts experienced in the overly burdened communities in this very region. The fact that these areas are in close proximity to Environmental Justice Communities requires that any polluting activity that seeks to locate in these areas must not further degrade the environment. The ACOE's facile blanket dismissal of the impacts of this highly dirty and massive project on wildlife habitat of all forms in this region will not withstand judicial scrutiny.

Further, the list of fish within a 2-mile radius of Calumet Harbor is quite extensive. (DMMP/EIS, p. 41) Reptiles and Amphibians in the area include the mudpuppy salamander, bull frog, snapping turtle; painted turtle, red-eared slider, and northern water snake.(p. ___) The DMMP/EIS itself states; "The study area offers refuge habitat for a variety of resident and migratory birds. The harbored lacustrine zone provides safe resting and foraging habitat...study area is within the Great Lakes route of the Mississippi Flyway, a globally significant route for hundreds of bird species and in particular, migratory song birds...163 species were identified to utilize the nearby Grand Calumet River watershed." (DMMP/EIS, p. 42) Federally-listed endangered wildlife identified in the DDMP/EIS itself include: Indiana Bat, Karner Blue Butterfly; northern long-eared bat; ruff red knot; Pitchers thistle; Mead's milkweed, as well as the State-Listed Endangered Osprey (p. 83) and the State-Listed Threatened Mudpuppy salamander.

h. Endangered Species

The DMMP/EIS is similarly dismissive of the impacts the proposed project will have on Endangered Species. "Because the alternative sites are located in disturbed urban environments, no significant impacts to any state-listed endangered or threatened species are expected to result from the DMDF development and use." (p. 100)

This is an unacceptable, unsupported conclusion. Federally-listed endangered wildlife identified in the DDMP/EIS itself include: Indiana Bat, Karner Blue Butterfly; northern long-eared bat; ruff red knot; Pitchers thistle; Mead's milkweed, as well as the State-Listed Endangered Osprey (p. 83) and the State-Listed Threatened Mudpuppy salamander.

Further, in 2015, Illinois Department Natural Resources listed wildlife of greatest conservation need in the Coastal Zone which includes the Study Area. That list includes:

Bird (1 total): piping plover

Fish (28 total):

lake sturgeon	central mudminnow
longnose sucker	brown bullhead
lake whitefish	bloater
slimy sculpin	lake chub
northern pike	muskellunge
Iowa darter	least darter
banded billfish	starhead minnow
silver lamprey	burbot
deepwater sculpin	ghost shiner
blackchin shiner	blackness shiner
yellow perch	trout perch
round whitefish	ninepin stickleback
longnose dace	brook trout
lake trout	

Crustacean (1 total) great lakes amphipod

Section 230.75(c) of the USEPA Guidelines under CWA Section 404(b)(1) provides that minimization of adverse effects on populations of plants and animals can be achieved by avoiding sites having unique habitat or other value, including habitat of threatened or endangered species. ACOE must perform a serious analysis of this massive, dirty project on those species. Further, for the Vertical Expansion alternative, ACOE must specifically consider species that frequent or live within the waters and shore of Lake Michigan.

i. CULTURAL RESOURCES

Again, the ACOE concludes that no cultural resources would be adversely impacted by the development of the DMDF according to any of the action alternatives. (It finds “no historic properties” exist “since...all of the proposed dredged material placement site locations had been recently and extensively disturbed by modern industrial , paving, and remediation activities.” DMMP/EIS, p. 100. Tellingly, this finding is limited to “historic properties within the proposed dredged material placement or access.” *Id.* Apparently, ACOE is using the term “cultural resources” here as limited to archaeological artifacts. To the extent that it refers to “cultural resources” which includes historic buildings, parks, beaches, and other cultural amenities beyond ancient artifacts, this finding is obviously unacceptable and must be reviewed. See our comments above regarding the EIS Screening Criteria for “Cultural Resources.”

j. RECREATION

Remarkably, but perhaps not surprisingly given its overall approach here, the DMMP/EIS (p. 101) also makes short shrift of the environmental impact of this massive, dirty project on recreation, saying “No current parkland or existing recreational facilities will be impacted by any of the action alternatives. “

In addition to the risks posed to the waters of Lake Michigan and of the adverse impacts of long-term exposure of local residents to air-borne and water-borne contaminants, the ACOE’s plan and EIS must consider the existing and potential health impacts on recreational users of Lake Michigan and the nearby parks.

In other sections of the DMMP/EIS, ACOE mentions the proximity of parks to the proposed Vertical Expansion site. As mentioned above parks are located on both sides of the existing CDF site. But, nowhere does ACOE provide an analysis of the environmental impacts of this project on these parks or the other multiple parks, beaches, harbors, and recreational resources and their users. This is a glaring deficiency in this study which must be revisited and revised. (See EPA Comments)

The following is readily available information on the recreational resources on the lakefront in the vicinity of ACOE’s Vertical Expansion that may be impacted by ACOE’s selection of that site for further dredge disposal.

LAKEFRONT FROM 67TH TO 103RD (APPROXIMATELY 4.5 MILES)		
Source: Maps and information from Chicago Park District 2017 Master Plan (Last update 7.29.2019)		
Community Area 43 - South Shore 3 Wards (5, 7 & 8) 67th street is northern boundary 79th street is southern boundary	Population in 2010, 49,767 40% youth (<20) and seniors (>64) Contains 11 parks - 3 on Lake Michigan -South Shore Cultural Center (2.4 miles from CDF), Arthur Ashe Beach Park (2 miles from CDF), and Rainbow Beach Park (1.4 miles from CDF) 3 beaches, 1 nature/bird sanctuary, 1 community garden	In 43 South Shore, SSCC beach is CPD, Nature Sanctuary is 6 acres of dune, wetland, woodland, prairie, savanna, shrubland Ashe beach is CPD, community garden is ornamental Rainbow beach (north of Filtration Plant) is CPD, there are also 10 acres of dune habitat
Community Area 46 - South Chicago 3 Wards (7, 8 & 10) 79th street is northern boundary	Population in 2010, 31,198 44% youth and seniors Contains 8 parks- 2 on Lake Michigan -	In 46 South Chicago, Another piece of Rainbow beach, also

North Bank Calumet River is southern boundary	Park 566 which is undeveloped (.5 mile from CDF), and Steelworkers Park (Across River From CDF) 1 beach, 2 boat launches	CPD, is south of Filtration Plant
Community Area 52 - East Side 1 Ward (10) South Bank Calumet River is 112 th is Northern boundary 116th, 117th Streets are southern boundary Location of Existing CDF and TSP	Population in 2010, 23,042 43% youth and seniors Contains 6 parks- 1 on Lake Michigan - Calumet Park (Adjacent To CDF) 3 beaches Calumet Yacht Club & Marina	Water purification plant is 1.6 miles from CDF In 52 East Side, Calumet has 2 separate beaches; Yacht Club beach has a street/pier separating it from Calumet's

4. EVALUATION OF ALTERNATIVE PLANS

a. Natural Resources

Again, in Section. 4.20 Evaluation of Alternative Plans, the DMMP/EIS finds no significant impacts of this massive, dirty project on any of the alternative sites. As to Natural Resources, the DMP/EIS concludes “There are no high quality natural resources at any of the sites included in the final array of alternatives. Stuningly, ACOE apparently doesn’t consider Lake Michigan to be a natural recourse!

With no evidence or data presented on the quality of the CDF discharge, the ACOE concludes that the discharge of stormwater and process water from the sediment dewatering operation and pumped from the CDF itself after filtration on site would not present a different impact than discharging to MWRD. But filtration alone does not treat the water for anything other than large particles. It is not equivalent to the three-stage water treatment that occurs at the MWRD. This statement requires evidence that the effluent quality meets the applicable water standards. None has been provided.

None of the other alternative would discharge stormwater effluent to the River or harbor. If this effluent meets water quality standards, why isn’t the ACOE discharging to the River from those alternative sites? The fact that ACOE is not including the costs of hooking up to the sewer system and discharging to the MWRD artificially reduces the cost of the Vertical Expansion alternative and results in an a cost-benefit comparison that is not apples-to-apples.

b. Cultural Resources

Again, now discussing the different impacts of the alternative plans, the DMMP/EIS (p. 117) dismisses the impact of the Vertical Expansion on “Cultural Resources.” This time the ACOE focuses solely on the site of the Vertical Expansion, ignoring all of the impacts of that site selection on the surrounding residences, communities, parks, beaches, and Lake Michigan which were discussed earlier. Here the ACOE admits that the Vertical Expansion will delay development of open space or parkland. But doesn’t find that to be a significant adverse impact. We disagree.

Delaying the long planned and anticipated return of this property to public use is an enormous loss for the surrounding Southside communities and the City of Chicago as a whole. This public trust land has already been occupied to the exclusion of the public for too long. Whole generations of Chicagoans have been denied the benefit of this public land as children and will now be denied access to his lakefront and park land for the rest of their lives. Further, the construction of the Vertical Expansion will render this 47 acres of lakefront unusable as a park permanently.

This taking of public land and renegeing on the ACOE’s contract with the Illinois General Assembly and the CPD is a high cost option and has a significant adverse impact for individual residents and the entire community and City. The ACOE’s failure to assign a high cost to this taking of public land in its cost/benefit analysis is another example of its misstatement of the costs of the Vertical Expansion option.

c. Socioeconomic Resources

The DMMP/EIS concludes that the Vertical Expansion option won’t have a negative socioeconomic impact as might occur at the other alternative sites where the site could displace future industrial development and the employment and revenue that could generate. and that it will eventually be a park or open space. (p. 117) Apparently, displacing the public’s use and access to the premier natural resource in the City and State has no comparable economic or social value in the view of the ACOE. According to the ACOE, because the Vertical Expansion site would ultimately be returned to the CPD, there would be no “permanent negative impact on socioeconomic resources.” These are fallacious arguments. The construction of the Vertical Expansion will not only unreasonably and illegal deny the public its bargained for access to this lakefront public trust property, it will permanently destroy its use as a public park. This is a highly significant adverse impact and should be so recognized by the ACOE.

5. EVALUATION OF THE TENTATIVELY SELECTED PLAN – TRADE-OFF ANALYSIS

Section 6 of the DMMP/EIS begins with a “Trade-Off Analysis” (pp. 124-128) that encapsulates the mistaken and improper characterizations of the Vertical Expansion option that the ACOE makes throughout this study. In this analysis, ACOE essentially weighs the likelihood of the risks and the magnitude of the harms associated with the other 4 upland sites and compares that to the same for the Vertical Expansion alternative. But the characterization of the risks and harms associated with the Vertical Expansion are understated throughout this analysis, revealing once again the lack of objectivity that ACOE has shown throughout this study.

a. Real Estate

In Section 6.1.2, the DMMP/EIS analyzes the “Key Uncertainties of Selecting the Vertical Expansion Alternative” as to Real Estate, as follows:

“The existing CDF property is owned by the Chicago Park District (CPD). Currently, CPD may not have plans or funding identified for park development and O&M at the existing CDF for post-closure. Further, there are limited options for post-closure public access to the site regardless of plans and funding, making use of the site for public recreation problematic. Through preliminary coordination, CPD has indicated that they would be supportive of vertical expansion of the CDF. Based on their own limitations for short term site use, CPD is willing to consider deferring their use of the site in support of the proposed DMDF. For the vertical expansion alternative, CPD would then need to sign on as a project co-sponsor for the providence of real estate for the **twenty year project life**. Therefore, this alternative has a low likelihood of causing delays in real estate acquisition that would affect implementation and channel maintenance dredging. The likelihood of a delay in acquisition under the Vertical Expansion alternative is ‘Low’ and the consequence is ‘HIGH’, making the associated risk rating ‘MEDIUM’.” (DMMP/EIS, p. 126)

The ACOE ranks the likelihood of an difficulty obtaining the real estate from the CPD to be “low”. This is based on assumption that there will be no delay in acquiring the Public Trust property and that the CPD and City will ultimately agree to fund and take responsibility for the OMRR&R, and assume liability associated with the vertical expansion. But, the DMMP/EIS provides no evidence of CPD’s or City’s agreement to this plan or to the City taking on these costs and liabilities. Also, the preliminary comments show there is public opposition to this proposal. Finally, because the Vertical Expansion will deprive the public of its use of the Public Trust land for an additional 25-40 years, this real estate is not legally available for this use.

b. Hazardous, Toxic, and Radioactive Waste

“The risk of contamination issues associated with the Vertical Expansion alternative is the lowest of all study alternatives. This is due to the fact that vertical expansion occupies the same footprint as the existing Chicago Area CDF. Prior to construction of the existing facility, the site was occupied by the near-shore waters of Lake Michigan. The current facility was completed in 1984, it has operated safely ever since. The likelihood of a remedial action being required is ‘LOW’ based on the industrial history of the site, and the consequence is ‘HIGH’. Therefore, the associated risk rating of potential HTRW issues at the site is ‘MEDIUM’.” (DMMP/EIS p. 126)

This conclusion is unsupported by the facts. As discussed in our comments herein, the Vertical Expansion, which will concentrate yet more hazardous and toxic dredge at this precarious location, presents a high likelihood of causing and worsening contaminant releases to Lake Michigan from both the new and the existing CDF. Further, this is a location with a park, beach and harbor directly downstream and a number other parks and beaches in close proximity. In fact, this option presents a prospect of catastrophic failure of the entire CDF and irreparable damage to the Lake Michigan shore as a result of “floating” another 1 million tons of highly contaminated dredge material on top of an unstable 1984 “in water” structure that was never intended for this purpose.

c. Social Considerations

“Vertical Expansion may be the most favorable site for the local community to support. First, this alternative would not require the construction of an entirely new disposal facility in the 10th Ward. Secondly, due to its isolation, the existing CDF has operated successfully here for over 30 years without conflict with the surrounding communities. There are legitimate concerns that the selection of vertical expansion would further delay turning this land into parkland. Despite the delay, this parcel will eventually become parkland in perpetuity following cessation of the DMDF operation. The likelihood that the proposed facility would negatively impact future development in the study area is ‘LOW’ and the consequence rating is ‘MEDIUM’. Therefore, the associated long-term risk related to social/socioeconomic considerations is ‘LOW’.” (DMMP/EIS, p. 127)

This conclusion is based on the faulty assumptions that the CDF has operated safely in the past and that this location is isolated and the massive, dirty construction of the Vertical Expansion will not impact nearby residents, the Lake, and the uses of parks, beaches and harbors. As discussed in the Cost/Benefit section below, this analysis also fails to place a value on the loss of public trust property and the anticipated park use for anticipated 25- 40 year duration of this proposal and likely in perpetuity due to the steep hill that the Vertical Expansion would create.

6. CONSIDERATION OF OTHER ALTERNATIVES: TREATMENT AND SEDIMENT REDUCTION

a. Private Landfill Disposal

ACOE eliminated Private Management in a Landfill upfront saying “Due to the increased cost of pursuing private management at the scale of this study and the lack of assured capacity, It was not retained for inclusion in the study alternatives.” (Exec. Sum p. 4) But ACOE’s analysis

of the costs associated with this option have not been made public and subject to the same scrutiny as have the other options. Given the mis-assignment of costs and failure to assign costs to various options, especially the Vertical Expansion option, which have been identified by FOTP, this conclusion regarding the cost of private landfill disposal should be reconsidered. Among other things, a private landfill builds into its costs the cost of safe management of toxic industrial wastes, including double liners, leachate collections systems, and groundwater monitoring. This reduces risks and liabilities. Modern landfill systems can actually reduce contaminants in the waste overtime and thus reduce post-closure care. Because landfills are not sited on surface waters, they don't require monitoring of surface waters in perpetuity. They don't require the Corps to acquire real estate or construct and operate the disposal unit. Nor do they require a Non-Federal public entity to maintain the disposal unit. These costs are all built into the tipping fees. If all costs are properly allocated to the Corps other options, the costs associated with the private landfill options it rejected may actually be lower.

b. Treatment

ACOE also eliminated the option of treating the highly contaminated dredge to reduce its toxicity and allow it to beneficially re-used. ACOE summarily found, "Preliminary costs estimates for these technologies were compared to estimated CDF costs and it was determined these measures would be significantly more costly to implement." (Exec. Sum . 4) Again, none of the ACOE's cost assumptions for this option were made available for public scrutiny.

A number of interested parties, including Southeast Environmental Task Force, Alliance for the Great Lakes, Southside Coalition to Ban Petcoke, Sierra Club of Illinois and Friends of the Parks have called for sediment treatment to minimize the amount of highly contaminated dredged material that must be permanently managed in a CDF. Even if not all of the dredged material qualified for treatment, treating the portions that do qualify might open up smaller alternative locations for a confined disposal facility outside of the 10th ward which has been over-burdened with landfills and industrial pollution.

In fact, substantial cost savings may be had by treating the dredge material rather than having to manage its toxic contaminants in a CDF in perpetuity. The ACOE should revisit its assumptions regarding treatment and do a proper apples-to-apples cost comparison of all of the costs attributable to each option before concluding that treatment is prohibitively expensive. This analysis must consider all costs – including both short and long term costs and the costs borne by both ACOE and the Non-Federal Sponsor.

c. Sediment Reduction

The DMMP/EIS also fails to review options for reducing dredged material volumes and contaminant concentrations, including (1) the performance of a study to identify the sources contributing to sediment loading throughout the Calumet River basin; and (2) a quantification of the reductions in load and contaminant concentrations that can be achieved by the ACOE

working with other agencies (federal, state, local) to develop an enforceable sediment reduction plan, with a focus on achieving reductions in load that are the greatest sources of contaminated sediment that in the short-term can reduce loading and in the long-term will obviate the need for containment of untreatable hazardous dredged material.

We urge the Army Corps of Engineers to cap the current CDF and reuse the space as it was originally intended, as park land. ACOE must consider all the costs with respect to Vertical Expansion identified herein. With these costs included and considering the cost savings that can be achieved through treatment, we believe the ACOE will have a clearer assessment of available alternatives, including treatment in lieu of disposal. If the ACOE decides to pursue the Vertical Expansion, it must go back and provide a revised Draft DMMP/EIS for public review and comments that responds to the many flaws and deficiencies noted herein prior to proceeding to a Final DMMP/EIS.

Please contact Sandra Del Toro, Deputy Director, at (312) 857-2757, ext. 1 or deltoros@fotp.org with any further questions.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Juanita Irizarry". The signature is written in black ink and is positioned above a horizontal line.

Juanita Irizarry
Executive Director
Friends of the Parks

Cc: Sandra Del Toro
Patricia Sharkey