



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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JUL 22 2019

REPLY TO THE ATTENTION OF:

Mail Code E-19J

Alex Hoxsie
U.S. Army Corps of Engineers – Chicago District
231 N. LaSalle St.
Suite 1500
Chicago, Illinois 60604

RE: EPA Comments: Draft Environmental Impact Statement - Chicago Area Waterway System Dredged Material Management Plan; City of Chicago, Cook County, Illinois (CEQ #20190081)

Dear Mr. Hoxsie:

The U.S. Environmental Protection Agency has reviewed a Draft Environmental Impact Statement (DEIS) prepared by the U.S. Army Corps of Engineers (USACE) for the proposed Dredged Material Management Plan (DMMP) for the Chicago Area Waterway System (CAWS). The non-federal sponsors are the City of Chicago (City, working through the Chicago Department of Transportation) and the Chicago Park District (CPD). This letter provides EPA's comments on the DEIS, pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

In 2014, USACE announced a plan for navigation channel maintenance dredging and disposal of dredged materials expected to be generated by the operation and maintenance of Federal navigation channels in the CAWS over a minimum 20-year period of analysis. There are six navigation projects in the CAWS. Among the CAWS channels, there are projected dredging needs only for Calumet Harbor and River and the Calumet-Sag Channel. The remaining channels do not have a projected dredging need in the next 20 to 25 years.

Maintenance dredging within the CAWS has the potential to remove contaminated sediments, which require disposal in a confined disposal facility (CDF) to isolate contamination. Contaminated sediment is currently placed into the existing CDF located on Lake Michigan near 95th Street. The facility, built in 1984, is a triangular-shaped area approximately 43 acres in size located in Calumet Harbor, south of the entrance channel to the Calumet River. It will soon be filled to capacity and will not be able to accept material past 2022 as currently operated. The Draft CAWS DMMP and integrated DEIS documents the analyses undertaken to identify and evaluate alternatives for dredged material management for the CAWS. Specifically, the DEIS

studies potential disposal alternatives (management measures) for handling the dredged material from the CAWS. These measures include options for altering dredging operations, beneficial use of uncontaminated dredged material, and safe handling of contaminated material. Vertical expansion of the existing CDF was also studied. None of the dredged material from the CAWS is currently suitable for open water placement or in-water beneficial use. The quality and composition of sediment from Calumet Harbor will allow for its beneficial use in upland, unconfined applications. However, due to contaminant levels, sediment from the Calumet River and the Cal-Sag Channel requires continued confined disposal.

Over the past several years, extensive efforts were made by USACE to identify potential sites for a new Dredged Material Disposal Facility (DMDF) that would meet multiple criteria such as technical requirements, federal policy, property availability, public and stakeholder interests, and non-federal sponsor and natural resource agency input. The final array of alternatives analyzed in the DEIS included the No Action alternative, construction of a new DMDF at one of four upland sites on the existing channel (Former KCBX Site, Former Wisconsin Steel Site, 116th and Burley, and the LTV Site), and vertical expansion of the existing Chicago Area CDF.

Based on a comparison of the risks associated with pursuing any of these alternatives, USACE's tentatively selected plan (TSP) is vertical expansion of the existing CDF. The TSP includes construction of a 530,000 cubic yard capacity DMDF on top of the existing Chicago Area CDF. Construction of a DMDF at this site would include berms constructed from the dredged material from Calumet Harbor. The existing CDF settling pond would be used to collect effluent, which would be directed to existing filter cells prior to being discharged to the Calumet River. This process is similar to how the existing CDF has been operated since it opened in the 1980s.

Of the anticipated 1,030,000 cubic yards of dredged material to be removed from the CAWS over the next 20 years, 500,000 (49%) of Calumet River Material and 30,000 (3%) of Cal-Sag Channel material will be placed into the DMDF. The remaining 500,000 cubic yards (48%) will be Calumet Harbor material to be beneficially-reused during DMDF construction and closure, as well as in other approved upland beneficial uses through an agreement with the non-federal sponsors. The development of an agreement between USACE and the non-federal sponsors to beneficially reuse the excess material dredged from Calumet Harbor not required for DMDF berm construction is ongoing. This agreement is vital to the success of the study and proposed project, as the TSP site is otherwise inadequately sized to facilitate storage of large quantities of beneficial use material.

EPA's comments on the DEIS are enclosed with this letter. Except for comments not relevant to the TSP, EPA reiterates the recommendations from our previous correspondence, including our December 18, 2014 letter to Charlene Carmack (Rock Island District) and our July 20, 2015 letter to Sue Davis (Chicago District). Some of our current comments repeat issues mentioned in those letters. We recommend that the Final EIS address these comments and our recommendations, which generally relate to sediment sampling and management, climate adaptation and resiliency, air quality impacts, and environmental justice.

Effective October 22, 2018, EPA no longer includes ratings in our EIS comment letters. Information about this change and EPA's continued roles and responsibilities in the review of federal actions can be found on our website at <https://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria>.

We commend USACE for the efforts undertaken to expand public involvement in the NEPA analysis and during the EIS process, and we appreciate the opportunity to review and provide comments on this DEIS. We are available to discuss our comments with you in further detail if requested. When the Final EIS is released, please send one paper copy and/or one CD of the document to our office or notify us electronically of its release. If you have any questions about this letter, please contact the lead NEPA Reviewer, Liz Pellosso, PWS, at 312-886-7425 or via email at pellosso.elizabeth@epa.gov.

Sincerely,



for
Kenneth A. Westlake
Deputy Director, Office of Multimedia Programs
Office of the Regional Administrator

cc (via email):

Shawn Cirton, USFWS
Nathan Grider, IDNR
Darren Gove, IEPA
Darin LeCrone, IEPA
Alderman Susan Sadlowski Garza, 10th Ward

EPA's Detailed Comments
Draft Environmental Impact Statement
Chicago Area Waterway System Dredged Material Management Plan

July 22, 2019

SEDIMENT SAMPLING / SEDIMENT MANAGEMENT

- The DEIS on page 31 notes that based on the levels of ammonia in the results from elutriate testing and the results from biological testing, open-water placement of Calumet Harbor sediments is not recommended at this time. However, the DEIS notes that concentrations are not high enough to rule out open-water placement as a “*potentially acceptable alternative in the future*” and states, “*future evaluation, including sediment and elutriate chemical analysis and biological testing, should be conducted to re-evaluate open water placement and fully investigate this placement alternative.*” The DEIS is unclear if such “future evaluation” would be undertaken during the 20-year period of analysis of the DEIS.

Recommendations: In the Final EIS (FEIS), clarify if “future evaluations” are planned, and if so, when and for what purpose.

- Section 3.11.2 of the DEIS implies that future dredged materials would be staged at the existing CDF site for dewatering. The DEIS is unclear if dredged materials will all be staged for dewatering at the Chicago CDF or if some/any dredged materials will be transported directly to beneficial use locations.

Recommendation: In the FEIS, expand the narrative information on materials management at the CDF to describe how future dredged sediments will be managed (e.g., staging and separation) at the CDF. Include information on the proposed dewatering of future beneficial use materials, distribution of beneficial use materials, and transport of beneficial use materials from drying pads to offsite beneficial use locations.

ENVIRONMENTAL CONSEQUENCES / PROJECT IMPACTS

- Page 101 of the DEIS states that none of the action alternatives would have a significant adverse impact on existing recreational opportunities and that in the long term, recreation would be a compatible possible use of the expanded CDF post-closure. However, the DEIS does not discuss the environmental consequences of the temporal loss in future parkland. Specifically, the expansion of the existing CDF means it will be another ~40 years before residents will have access to lakefront parkland, assuming that the CDF is converted into a park for recreational use post-closure.

Recommendations: Provide information on the expected environmental consequences associated with the delay in conversion to parkland in the FEIS.

CLIMATE ADAPTATION / RESILIENCY

- The current CDF juts into and is bordered on two sides by Lake Michigan. The Great Lakes are at their highest levels in recorded history and many locations are experiencing more frequent and heavier precipitation events. Section 4.5 of the DEIS (p. 115) states, “...*the proposed action is confined to a specific area and there are no aspects of the project that would affect climate. Additionally, changing climatic conditions in the future would not have a significant impact on a proposed DMDF on any of the alternative sites.*” However, the DEIS/Appendix H did not consider the vertically-expanded CDF’s ability to withstand extreme water and wave events over the period of analysis (and beyond). Additionally, the DEIS/Appendix H did not discuss whether rising water levels in Lake Michigan have affected the existing CDF.

Recommendations: Add a discussion in the FEIS regarding if, and how, rising water levels in Lake Michigan have affected the existing CDF. Provide information on the steps USACE is taking to ensure that the existing CDF will not be adversely affected by rising lake levels in the future, and the steps USACE will undertake to protect the CDF (as expanded/proposed) from rising lake levels. Provide additional information regarding reasonably foreseeable effects that changes in the climate may have on the proposed project and the project area (for the TSP especially), including its long-term infrastructure. This could help inform the development of measures to improve the resilience of the proposed project. If projected changes could notably exacerbate the environmental impacts of the project, EPA recommends these impacts also be considered as part of the NEPA analysis. In the FEIS, EPA recommends that USACE further explain why “changing climatic conditions in the future would not have a significant impact” on construction of a new DMDF at any of the sites, including the TSP. The FEIS should clarify whether commitments have been made to ensure implementation of design alterations or other measures to provide resiliency. Considerations could include, but are not limited to:

- Commitments to specific best practices to minimize greenhouse gas emissions from construction and operations. Assess energy efficiency, renewable energy, electrification of equipment, and cleaner diesel strategies for inclusion in planning documents and construction contractor scopes of work. Consider that reducing diesel emissions have the added benefit of reducing black carbon emissions, which have climate-forcing effects orders of magnitude larger than carbon dioxide on a per-mass basis; and
- Based on the project team’s assessment of climate change impacts associated with the project (and consistent with federal policy), how resiliency and adaptation to changing climate conditions have been factored into project siting, design, and mitigation decisions.

SEDIMENT QUALITY AND TESTING

- The Executive Summary (on p.2, unnumbered), the DEIS states, “*Due to elevated levels of contamination in material dredged from Calumet River and the Cal-Sag Channel, this material cannot be placed in open water or unconfined upland locations.*”

Recommendations: In the FEIS, clarify what "elevated levels of contamination" means (i.e., elevated compared to what?)

- Page 28 of the DEIS (Section 2.2.3 Sediment Quality) states, “*Analysis of sediment quality within the study area was conducted as part of the GLMRIS Report Appendix B. Additional information on this topic can be found in Section B.1.2.3 of the Appendix B [of GLMRIS] and is incorporated here by reference.*” The GLMRIS Report (referenced in the DEIS as “USACE 2014”) is not included in the DEIS list of references. Regardless, Section 2.2.3 does not provide enough information on what the GLMRIS Report’s “analysis of sediment quality” concluded.

Recommendations: In the FEIS, expand Section 2.2.3 to provide additional narrative information and a meaningful summary of the GLMRIS Report’s “analysis of sediment quality.” Add the GLMRIS Report to the list of references in the FEIS.

- Historically, concentrations of PCBs in the water samples collected from the Calumet River have been below the detection limit, but the concentrations of PCBs measured in sediment samples from the Calumet River have varied from non-detectable to a maximum of 39 mg/kg in 1989, as shown in the Tier 1 Sediment Evaluation prepared November 2010 (p.29-30). Under the Toxics Substances Control Act (TSCA), the PCB regulatory threshold is 50 mg/kg.

Recommendations: EPA recommends that USACE undertake additional sampling for PCB levels in sediments to be placed in the CDF, both during and after the vertical expansion of the CDF, to ensure PCB levels continue to stay below this threshold.

AIR POLLUTANTS / AIR QUALITY IMPACTS

- Pages 28 of the DEIS (Section 2.2.3 Sediment Quality) states, “*The list of contaminants of concern identified for Calumet Harbor and River sediment includes arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, zinc, ammonia nitrogen, oil and grease, phosphorus, cyanide, and polychlorinated biphenyls (PCBs). Although the list does not include semi-volatile organic compounds (SVOCs), analytical testing for these compounds was performed for a sediment sampling event in 2000 in Calumet Harbor.*”

Page 29 states, “*A human health risk-based screening was conducted based on the analytical results of Calumet Harbor sediment samples collected in 2011 to determine whether the analytical by results [sic] from the sampling event were less than either the Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action (TACO) or USEPA regional residential soil screening levels (see Appendix C).*”

Section 2.2.3 establishes that Calumet River and Cal-Sag Channel sediments are highly contaminated. The process of dredging, transporting and placing sediments contaminated with these and other toxicants (e.g., pesticides/herbicides DDE, DDT, 2,4-D, as noted in Appendix C - p. 117/1251) in the Chicago Area CDF/DMDF and drying them there has the potential to transfer contaminants to air and expose nearby neighborhoods and residents. The DEIS did not appear to consider these potential residential exposures and the ramifications of exposure.

Recommendations: Include a discussion in the FEIS on the potential for transference of contaminants to air, including the potential for exposure to nearby neighborhoods and residents. If exposure potential exceeds regulatory thresholds, the FEIS should discuss and commit to appropriate mitigation measures to reduce exposures below regulatory thresholds.

- The contaminants of concern (COC) listed on p. 29 of the DEIS did not include semi-VOC (SVOC) compounds, though the DEIS states that analytical testing for these compounds was performed for a sediment sampling event in 2000 in Calumet Harbor. The results of the testing were not provided in the DEIS.

Recommendations: Include a discussion on the results of 2000 analytical testing for SVOCs in the FEIS. Provide clarification on whether SVOCs will or will not, and why or why not, be considered a COC after the vertical expansion of the existing CDF.

- The existing CDF is located within 0.5-1.0 mile of residential areas. The DEIS does not appear to have considered residential air concentrations of and human exposure to CDF/DMDF-emitted air pollutants over the duration of operations at the facility.

Recommendations: Include this analysis in the FEIS, and if relevant, discuss and commit to appropriate mitigation measures.

- Page 82 of the DEIS states that wet dredged materials are either dried and then moved into the facility, or are unloaded directly inside the facility and allowed to dry in place. The drying process takes approximately a year. No information was provided in the DEIS on how USACE is accounting for sediment emissions during dredging, barge placement, sediment drying, and transportation to the CDF/DMDF.

Recommendations: Provide clarification on how USACE is accounting for sediment emissions during this time of active transport and drying.

- Page 98 of the DEIS (Section 4.4 Air Quality) states, “*The proposed emissions would be limited to mobile source (equipment and vehicle) emissions and general dust emissions, since the facility would not include any processes or operations that are stationary source emissions.*” The DEIS did not provide data utilized to come to this conclusion.

Recommendations: Provide clarification on the proposed construction is expected to have a minimal impact on air quality in the study area without having completed data

gathering or analysis. Provide information on the data analysis used to support USACE's conclusion.

- Page 98 of the DEIS also states, "*Because the CAWS DMMP construction is expected to have a minimal impact on air quality in the study area, it was determined to be unnecessary to conduct a detailed analysis using air quality models.*" Although construction of the DMMP expansion may not have a substantial effect on air quality, the DEIS was silent about the effects on air quality during dredging, moving, placement and drying of dredged sediments contaminated with compounds mentioned in 2.2.3 Sediment Quality (and potential others) others over the years in an expanded DMMP/CDF. As noted in comments above, the DEIS did not appear to consider these potential residential exposures and the ramifications of exposure.

Recommendations: Include a discussion in the FEIS on the potential for transference of contaminants to air, including the potential for exposure to nearby neighborhoods and residents and if necessary, any relevant mitigation measures.

- As noted above, the DEIS predicts that construction and operation of the DMDF are predicted to have a minimal effect on air quality in the vicinity of the CDF. Particulate emissions from the dredged materials staging and CDF disposed sediments are expected to be a concern only under "certain weather conditions" and as long as proper controls for dust emissions reduction are in place.

Recommendation: In the FEIS, expand the above explanation to describe the weather conditions that could be problematic for particulate emissions. Describe in more detail the controls that could be put in place as regular or temporary mitigation methods for particulate and dust emission controls. This could include, but is not limited to, the following: 1) keeping the disposed sediments ponded as much as possible; 2) installing tree lines or wind-break fences to reduce the upgradient wind currents passing over the sediments; 3) seeding the disposed sediments to create a vegetation layer; or 4) a combination of those methods.

- The DEIS provides information about groundwater monitoring but provides no information on air monitors or proposed monitoring for airborne sediment or particulate matter (PM) emissions before, during and after project construction. Page 98 of the DEIS states that particulate emissions are not expected to be a concern "*as long as the DMDF operation incorporates proper controls to reduce the potential dust emissions that may occur under certain weather conditions.*"

Recommendations: EPA recommends the installation and use of additional air monitors (for PM at a minimum) around the project site. This would allow USACE to confirm if the proposed control methods (wetting the sediment, silt fences, or vegetation) are adequate. The FEIS should discuss USACE's proposals for air monitoring before, during, and after project construction. Additional monitoring should be committed to in the NEPA decision document.

- Page 98 of the DEIS states, “...*the general conformity analysis is potentially applicable [to the proposed alternatives]*” because the proposed emissions from the TSP would be limited to mobile source and general dust emissions. There was no rationale provided on why the TSP and other action alternatives would not include analysis of stationary source emissions. Given that the new vertical expansion will increase the facility height an additional 25 feet, it could potentially generate measurable windborne sediments on any windy day. It is not practical to assume that future dust emissions will not be an issue just because “*dust from the current facility has not been an issue during the past 30 years of management.*” Additionally, the DEIS did not explain how USACE will estimate level of sediment emissions from the new vertical expansion and whether those emissions will still meet Illinois Environmental Protection Agency (IEPA) general conformity limits.

The DEIS does not state the height of the existing CDF, nor does it provide the final height of the CDF/DMMP after the proposed 25-foot vertical expansion. This information is important because it may affect how the sediment and dust emissions will transport and disperse during and after loading/placing into the facility (but before being covered/capped), especially during unusual weather events.

Recommendations: Include a rationale in the FEIS on why the TSP and other action alternatives would not require analysis of stationary source emissions, considering the TSP proposes a 25-foot vertical expansion. Provide an explanation on how USACE is estimating levels of sediment emissions from the TSP as proposed and whether those emissions will meet IEPA general conformity limits. Clarify in the FEIS the height of the existing CDF and the proposed final height (including the 25’ expansion).

- IEPA operates an air monitoring station at George Washington High School, located southwest of the project location. Reported pollutants include fine particulate matter (PM_{2.5}); inhalable particulate matter (PM₁₀); lead (Pb-NAAQS); and toxic metals as total suspended particulates (TSP). Page 31 of the DEIS states, “*Sediment samples collected in 2009 were analyzed for various metals, SVOCs, pesticides, VOCs, and general chemistry... While the concentrations of all tested parameters exceeded the various criteria, the most prominent were SVOCs, ammonia, PCBs, and metals. These parameters are therefore expected to be the focus of future investigations.*” The DEIS did not mention any local air monitoring station nor did it analyze if the particulate emissions that are locally monitored have been affected by operation of the existing CDF or are expected to be affected by the future DMDF construction and operation as proposed in the TSP.

Recommendations: The FEIS should discuss current and proposed air monitoring efforts in the project vicinity, including any that are undertaken by USACE in addition to by others. Potential offsite impacts to air quality should be analyzed and discussed. The Final EIS should include locations of the existing air quality monitors at the Chicago Area CDF and discuss how USACE plans to provide information and monitoring data during construction, operation, closure, and post-closure of the proposed Vertical Expansion.

ENVIRONMENTAL JUSTICE

- The 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.

The Environmental Justice Interagency Working Group’s Promising Practices for EJ Methodologies in NEPA Reviews¹ states, “*Agencies’ approaches should not determine that a proposed action or alternative would not have a disproportionately high and adverse impact on minority populations and low-income populations solely because the potential impacts of the proposed action or alternative on the general population would be less than significant (as defined by NEPA). Agencies may wish to consider unique vulnerabilities, special exposure pathways, and cultural practices associated with minority populations and low-income populations in the affected environment.*”

Agencies should also consider the degree to which any other extenuating factors² amplify identified impacts. Factors that can potentially amplify an impact to minority populations and low-income populations in the affected environment related to this project include, but are not limited to:

- The presence of vulnerable populations (e.g., minority and low-income children, pregnant women, elderly, or groups with high asthma rates); and
- The condition of physical infrastructure (e.g., substandard housing conditions, old or no in-home HVAC/filtration roads, older windows, inability to make in-home changes due to rental vs. home-ownership)

Recommendations: The FEIS should include additional environmental justice analysis. Specifically, USACE should consider factors that can amplify identified impacts (e.g., the unique exposure pathways, prior exposures, social determinants of health) to ensure a comprehensive review of potential disproportionately high and adverse impacts to minority populations and low-income populations. EPA recommends that USACE reassess whether there are, in fact, any disproportionately high and adverse impacts

¹ <https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews>

² See USEPA, Factors for Identifying and Addressing Disproportionate Environmental Health Impacts (2007); Supplement to American Journal of Public Health, Vol. 101, No. S1 (Dec 2011).

expected, and if those disproportionately high and adverse impacts are considered “significant” under NEPA through a review of context and intensity. Consistent with applicable requirements, USACE should state in the FEIS whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted. (See 40 CFR §1502.2(c)).

WATER QUALITY

- A new berm system and two sediment disposal cells will need to be constructed at the Chicago CDF to implement the TSP. The DMDF construction will include wick drains beneath the new berms and apparently expanded sediment cell water drainage leading to the south drainage pond. The explanation for management of DMDF water effluents in the DEIS was minimal.

Recommendation: In the FEIS, please expand on the description of effluent management from contaminated materials that will need to be managed for the life of the project. Provide an explanation on how effluent water is managed at the drainage pond to prevent direct releases to Lake Michigan. Provide more details on the operation of filter cells and what constituents are removed from the water stream. Explain why contaminant monitoring is not performed and/or required (i.e., to meet state water quality standards) on the effluent stream before discharge to the Calumet River.

PROJECT CORRESPONDENCE

- The DEIS did not state how USACE planned to respond to comments received during the DEIS comment period.

Recommendation: In the FEIS, create a new appendix to include all comments received during the DEIS comment period – including the transcript from the public hearing(s) and all comment letters received. For all agency letters received, include USACE’s responses to specific comments from each letter. EPA also recommends that the appendix include all correspondence sent to and received from the resource agencies regarding the DEIS.

DOCUMENT CLARIFICATION / CORRECTIONS

- Section 1.8 (p. 5) references Figure XX and Section XX.

Recommendations: In the FEIS, add specific figure and section numbers to which the document is referencing.

- Section 1.13.5 of the DEIS (Great Lakes and Mississippi River Interbasin Study) refers to the study more commonly known as GLMRIS; however, the acronym is not included in the Section title.

Recommendations: Include the acronym in the Section 1.13.5 title (i.e., “1.13.5 Great Lakes and Mississippi River Interbasin Study (GLMRIS)”).

- Page 46 of the DEIS references Table 15 (demographic data); however, Table 15 is missing. Page 46 also appears to be missing text as the preceding sentence ends abruptly; “*The demographic data presented in [page break] Table 15...*”

Recommendations: In the FEIS, correct these omissions and errors.

- Page 82 of the DEIS includes a discussion on the existing CDF, noting, “...*the bottom of the existing CDF is the naturally occurring clay bottom “bed” material of Lake Michigan, rather than a constructed liner.*” EPA is aware that there have been concerns from the public that the CDF was originally built without a liner and concerns about the effects of adding more dredged material to the CDF. In a phone conversation between EPA and USACE staff on 5/24/2019, EPA staff were informed that the CDF was originally built with a geotextile liner as well as a sand liner. Page 93 of the DEIS mentions an additional “sand blanket” placed at the facility and references a 1998 Supplemental EIS. Additionally, USACE staff noted that USACE’s Engineer Research and Development Center (ERDC) has published a technical paper on the liner of the CDF that documents that nothing is leaching out of the CDF into Lake Michigan. USACE also clarified that they monitor water quality annually.

Recommendations: Expand the narrative information provided on the CDF and its original construction, including how addition of more dredged material onto the original CDF base will affect the aquatic environment.

- Page 114 references compilation of “this EA,” not EIS.

Recommendations: Correct this error in the FEIS.

- The GLMRIS Report (referenced in the DEIS as “USACE 2014”) is not included in the list of document references.

Recommendations: Correct this omission in the FEIS.